

# Panasonic®

## Operating Instructions

### Network Camera

Indoor Use Only

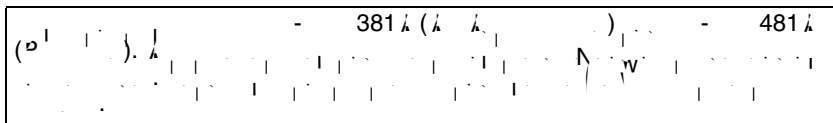
Model No. **BB-HCM381A** (AC Adaptor Type)  
**BB-HCE481A** (PoE Type)



Please read this manual before using, and save this manual for future reference.

Panasonic Network Camera Website: <http://www.panasonic.com/netcam>

<sup>a</sup>  $\chi^2 = 1.0$ ,  $df = 1$ ,  $p = .32$ . <sup>b</sup>  $\chi^2 = 1.0$ ,  $df = 1$ ,  $p = .32$ . <sup>c</sup>  $\chi^2 = 1.0$ ,  $df = 1$ ,  $p = .32$ . <sup>d</sup>  $\chi^2 = 1.0$ ,  $df = 1$ ,  $p = .32$ .



## IPv6\*<sup>1</sup> Network Camera

[illegible]**PoE (Power over Ethernet) Supported<sup>\*2</sup> (For Only BB-HCE481A [PoE Type])**[illegible]

**Audio 2-way Communication<sup>\*3</sup> (Walkie-talkie Type)**

[illegible]

- *La casa di un'isola*, 1934, 1935, 1936, 1937, 1938, 1939, 1940, 1941, 1942, 1943, 1944, 1945, 1946, 1947, 1948, 1949, 1950, 1951, 1952, 1953, 1954, 1955, 1956, 1957, 1958, 1959, 1960, 1961, 1962, 1963, 1964, 1965, 1966, 1967, 1968, 1969, 1970, 1971, 1972, 1973, 1974, 1975, 1976, 1977, 1978, 1979, 1980, 1981, 1982, 1983, 1984, 1985, 1986, 1987, 1988, 1989, 1990, 1991, 1992, 1993, 1994, 1995, 1996, 1997, 1998, 1999, 2000, 2001, 2002, 2003, 2004, 2005, 2006, 2007, 2008, 2009, 2010, 2011, 2012, 2013, 2014, 2015, 2016, 2017, 2018, 2019, 2020, 2021, 2022, 2023, 2024, 2025, 2026, 2027, 2028, 2029, 2030, 2031, 2032, 2033, 2034, 2035, 2036, 2037, 2038, 2039, 2040, 2041, 2042, 2043, 2044, 2045, 2046, 2047, 2048, 2049, 2050, 2051, 2052, 2053, 2054, 2055, 2056, 2057, 2058, 2059, 2060, 2061, 2062, 2063, 2064, 2065, 2066, 2067, 2068, 2069, 2070, 2071, 2072, 2073, 2074, 2075, 2076, 2077, 2078, 2079, 2080, 2081, 2082, 2083, 2084, 2085, 2086, 2087, 2088, 2089, 2090, 2091, 2092, 2093, 2094, 2095, 2096, 2097, 2098, 2099, 2100, 2101, 2102, 2103, 2104, 2105, 2106, 2107, 2108, 2109, 2110, 2111, 2112, 2113, 2114, 2115, 2116, 2117, 2118, 2119, 2120, 2121, 2122, 2123, 2124, 2125, 2126, 2127, 2128, 2129, 2130, 2131, 2132, 2133, 2134, 2135, 2136, 2137, 2138, 2139, 2140, 2141, 2142, 2143, 2144, 2145, 2146, 2147, 2148, 2149, 2150, 2151, 2152, 2153, 2154, 2155, 2156, 2157, 2158, 2159, 2160, 2161, 2162, 2163, 2164, 2165, 2166, 2167, 2168, 2169, 2170, 2171, 2172, 2173, 2174, 2175, 2176, 2177, 2178, 2179, 2180, 2181, 2182, 2183, 2184, 2185, 2186, 2187, 2188, 2189, 2190, 2191, 2192, 2193, 2194, 2195, 2196, 2197, 2198, 2199, 2200, 2201, 2202, 2203, 2204, 2205, 2206, 2207, 2208, 2209, 2210, 2211, 2212, 2213, 2214, 2215, 2216, 2217, 2218, 2219, 2220, 2221, 2222, 2223, 2224, 2225, 2226, 2227, 2228, 2229, 2230, 2231, 2232, 2233, 2234, 2235, 2236, 2237, 2238, 2239, 2240, 2241, 2242, 2243, 2244, 2245, 2246, 2247, 2248, 2249, 2250, 2251, 2252, 2253, 2254, 2255, 2256, 2257, 2258, 2259, 2260, 2261, 2262, 2263, 2264, 2265, 2266, 2267, 2268, 2269, 2270, 2271, 2272, 2273, 2274, 2275, 2276, 2277, 2278, 2279, 2280, 2281, 2282, 2283, 2284, 2285, 2286, 2287, 2288, 2289, 2290, 2291, 2292, 2293, 2294, 2295, 2296, 2297, 2298, 2299, 2300, 2301, 2302, 2303, 2304, 2305, 2306, 2307, 2308, 2309, 2310, 2311, 2312, 2313, 2314, 2315, 2316, 2317, 2318, 2319, 2320, 2321, 2322, 2323, 2324, 2325, 2326, 2327, 2328, 2329, 2330, 2331, 2332, 2333, 2334, 2335, 2336, 2337, 2338, 2339, 2340, 2341, 2342, 2343, 2344, 2345, 2346, 2347, 2348, 2349, 2350, 2351, 2352, 2353, 2354, 2355, 2356, 2357, 2358, 2359, 2360, 2361, 2362, 2363, 2364, 2365, 2366, 2367, 2368, 2369, 2370, 2371, 2372, 2373, 2374, 2375, 2376, 2377, 2378, 2379, 2380, 2381, 2382, 2383, 2384, 2385, 2386, 2387, 2388, 2389, 2390, 2391, 2392, 2393, 2394, 2395, 2396, 2397, 2398, 2399, 2400, 2401, 2402, 2403, 2404, 2405, 2406, 2407, 2408, 2409, 2410, 2411, 2412, 2413, 2414, 2415, 2416, 2417, 2418, 2419, 2420, 2421, 2422, 2423, 2424, 2425, 2426, 2427, 2428, 2429, 2430, 2431, 2432, 2433, 2434, 2435, 2436, 2437, 2438, 2439, 2440, 2441, 2442, 2443, 2444, 2445, 2446, 2447, 2448, 2449, 2450, 2451, 2452, 2453, 2454, 2455, 2456, 2457, 2458, 2459, 2460, 2461, 2462, 2463, 2464, 2465, 2466, 2467, 2468, 2469, 2470, 2471, 2472, 2473, 2474, 2475, 2476, 2477, 2478, 2479, 2480, 2481, 2482, 2483, 2484, 2485, 2486, 2487, 2488, 2489, 2490, 2491, 2492, 2493, 2494, 2495, 2496, 2497, 2498, 2499, 2500, 2501, 2502, 2503, 2504, 2505, 2506, 2507, 2508, 2509, 2510, 2511, 2512, 2513, 2514, 2515, 2516, 2517, 2518, 2519, 2520, 2521, 2522, 2523, 2524, 2525, 2526, 2527, 2528, 2529, 2530, 2531, 2532, 2533, 2534, 2535, 2536, 2537, 2538, 2539, 2540, 2541, 2542, 2543, 2544, 2545, 2546, 2547, 2548, 2549, 2550, 2551, 2552, 2553, 2554, 2555, 2556, 2557, 2558, 2559, 2560, 2561, 2562, 2563, 2564, 2565, 2566, 2567, 2568, 2569, 2570, 2571, 2572, 2573, 2574, 2575, 2576, 2577, 2578, 2579, 2580, 2581, 2582, 2583, 2584, 2585, 2586, 2587, 2588, 2589, 2590, 2591, 2592, 2593, 2594, 2595, 2596, 2597, 2598, 2599, 2600, 2601, 2602, 2603, 2604, 2605, 2606, 2607, 2608, 2609, 2610, 2611, 2612, 2613,

### Note

- [illegible]

$$*1 \quad \dots \dots \dots \circ 6, \dots \dots \dots \circ_1 \text{ " } \circ 4/ \circ 6 \quad - \quad \text{ " } \text{ " } \circ 6 \quad \circ 4$$

\*2 - 481

\*3

[illegible]



Figure 1 shows a 1D lattice with 12 sites. The sites are numbered 1 to 12. Particles are represented by vertical bars. The particles are labeled with 'w' and 'v' superscripts, indicating their type. The diagram shows a sequence of particles and empty sites: w, w, v, w, w, w, w, w, w, w, w, w.

[illegible][illegible][illegible][illegible]

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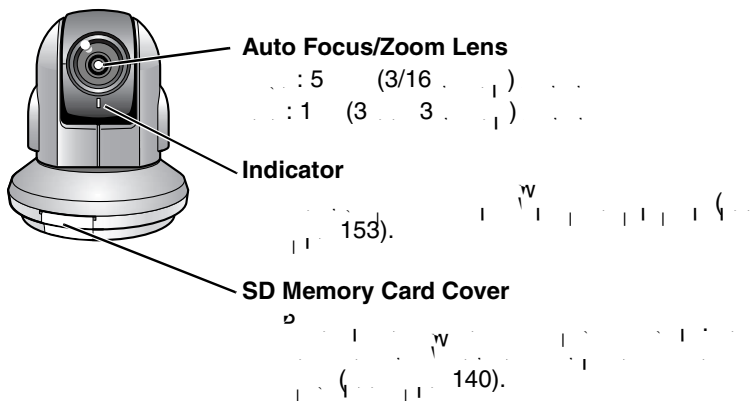
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## 1 Camera Monitoring

## 1.1 BB-HCM381A Feature Locations

### 1.1.1 Front View



## Indicator Display

Figure 10: Example of a complex musical score with multiple staves and complex notation, including various musical symbols and a large, complex notation at the bottom.



## 1.1.2 Rear View

Ethernet (LAN) port

Audio/Video terminals

External I/O  
(164)

DC IN jack

## 1.1.3 Bottom View

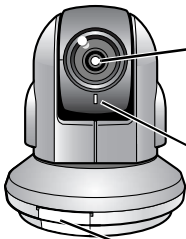
DC IN jack  
(164)

Hole for

(164)

# 1.2 BB-HCE481A Feature Locations

## 1.2.1 Front View



Auto Focus/Zoom Lens

5 (3/16")  
1 (3/32")

Indicator

SD Memory Card Cover

## Indicator Display

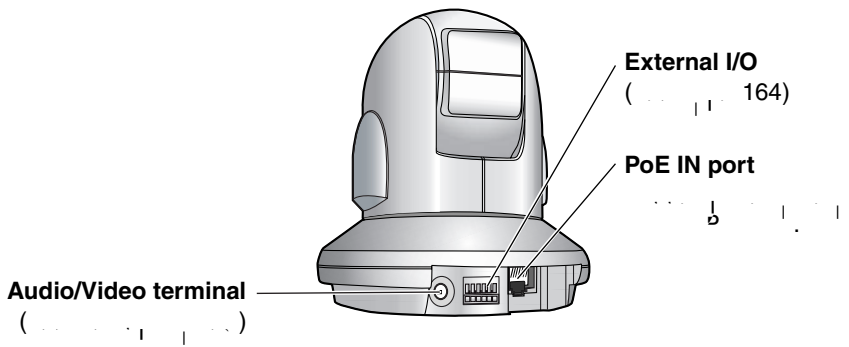

\*1

\*2

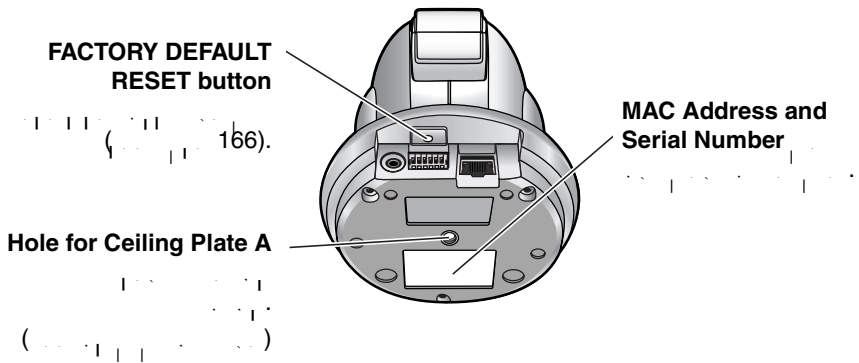
5

6





## 1.2.2 Rear View




## 1.2.3 Bottom View




# 1.3 How to Turn on the Camera

- Press the **Power** button (  ) to turn on the camera. (  )
- Press the **Power** button (  ) to turn on the camera. (  )

## BB-HCM381A

- Press the **Power** button (  ) to turn on the camera.
- Press the **Power** button (  ) to turn on the camera.

## BB-HCE481A<sup>\*1</sup>

- Press the **Power** button (  ) to turn on the camera.
- Press the **Power** button (  ) to turn on the camera.

<sup>\*1</sup> - Press the **Power** button (  ) to turn on the camera. (  )

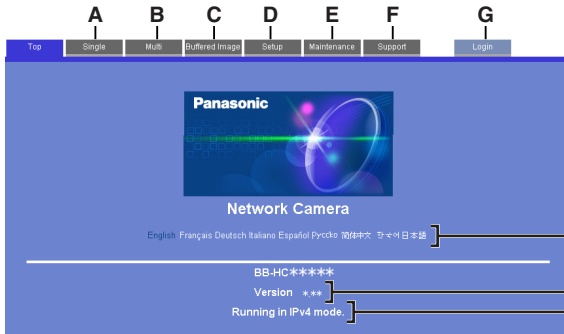
## 1.4 Accessing the Camera

1. [Accessing the Camera](#)
2. **"http://IPv4 Address (or URL):Port Number"**
  - `80 ( ), 50`
  - `6 15 16,`
  - **"http://(IPv6-registered URL):Port Number"**
  - `9 /`
  - `://192.168.0.253:50000 (in IPv4)`
  - `://*****:50000 (in IPv6)`
3. [Accessing the Camera](#)

### **Note**

- `*****`

4.



A ( 17)  
C ( 38)  
E ( 154)  
G ( 92)

B - ( 36)  
D ( 45)  
F ( 163)

### Note

5.

## 1.4.1 To Access the Camera in IPv6

- PC Requirements

Operating System:

Web Browser:

- An IPv6 Router

- An IPv6 Connection Service

### IPv6 Domain Name Service

#### What is IPv6?

- IPv6 is the next generation of the Internet Protocol (IP) that provides a much larger address space than IPv4.
- IPv6 addresses are 128 bits long, compared to 32 bits for IPv4.
- IPv6 addresses are represented in hexadecimal notation, separated by colons.
- IPv6 addresses can be abbreviated by removing leading zeros and by using a double colon (::) to represent one or more consecutive zeros.
- IPv6 addresses are assigned by Internet Service Providers (ISPs) or by other organizations.
- <http://www.ipv6.org/>

### Setting up the IPv6 Router, your PC, and the Camera

#### Setting up the IPv6 Router

For more information on setting up the IPv6 Router, please refer to the user manual or visit the Panasonic website at <http://panasonic.co.jp/pcc/products/en/netwkcaml>.

1. *Journal of the American Medical Association*, 2000; 284: 2689-2694.

- Note**

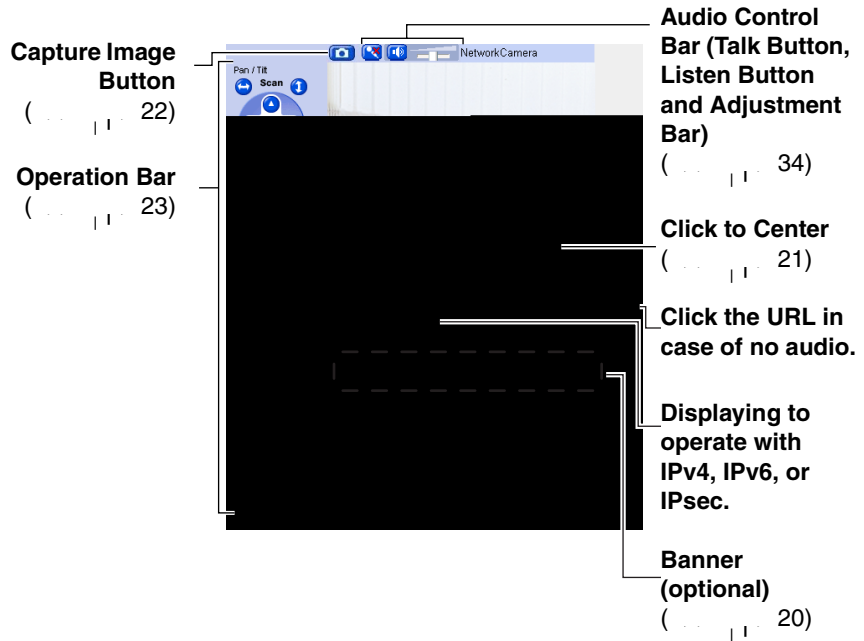
- ## Setting up the Camera

- ## Confirming that You Can Access the Camera



# 1.5 Viewing the Single Camera page

1. Click the **Single Camera** button (Figure 13).
2. Click the **Single Camera** button (Figure 19).



3. Click the **Single Camera** button.

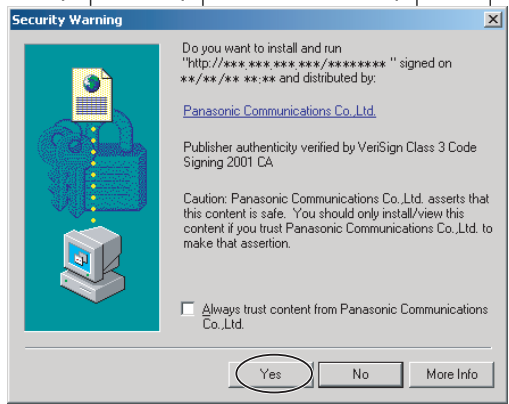
## Note

- Click the **Single Camera** button (Figure 23).
- Click the **Single Camera** button (Figure 23).

- The following error messages are displayed when the user attempts to open a file that is not a valid PDF file (e.g., a text file or a spreadsheet file).  
 The error message "Invalid PDF file" is displayed. (Figure 30)
- The error message "Invalid PDF file" is displayed. (Figure 30)
- The error message "Invalid PDF file" is displayed. (Figure 93).
- The error message "Invalid PDF file" is displayed. (Figure 80).
- The error message "Invalid PDF file" is displayed. (Figure 80).
- The error message "Invalid PDF file" is displayed. (Figure 80).

Error Message	Cause and Remedy
The error message "Invalid PDF file" is displayed.	The error message "Invalid PDF file" is displayed. (Figure 150).
The error message "Invalid PDF file" is displayed.	The error message "Invalid PDF file" is displayed. (Figure 30).

# Security Warning window

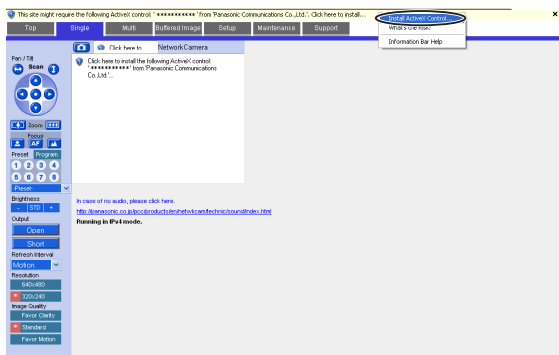


If you cannot install ActiveX Controls or you cannot see the video using the Internet Explorer

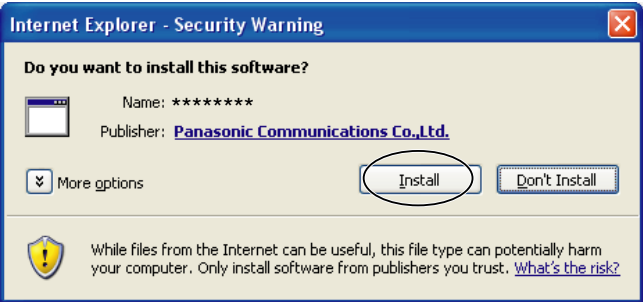
## Note

# Security Warning window on Microsoft Windows XP Service Pack 2

1.



2.



## 1.5.1 Displaying the Banner

145).

## 1.5.2 Auto Centering the Image (Click to Center)

1.



2.

- The image is now centered.
- The image is now centered.

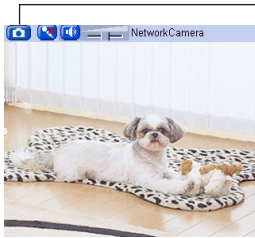


### Note

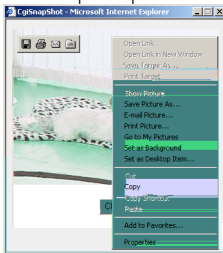
- The image is now centered.
- The image is now centered.
- The image is now centered.

### 1.5.3 Capturing a Still Image

1. Open the camera's web page.
2. Click the camera icon in the top-left corner of the page.

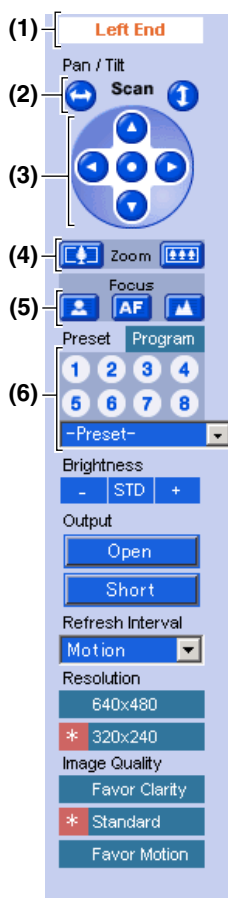


3. Right-click the image and select **Save Picture As...**



4. Click **Save** in the Save dialog box.
5. The image is saved to the specified location.

## 1.5.4 Using the Operation Bar



### (1) End Display and Preset Display:

Pressing the **Left End** button (1) will display the End Display and Preset Display.

### (2) Pan Scan/Tilt Scan:

Pressing the **Scan** button (2) will start the Pan Scan/Tilt Scan.

### (3) Pan/Tilt/Home Position:

Pressing the **Home** button (3) will return the camera to the Home Position.

### (4) Zoom Buttons:

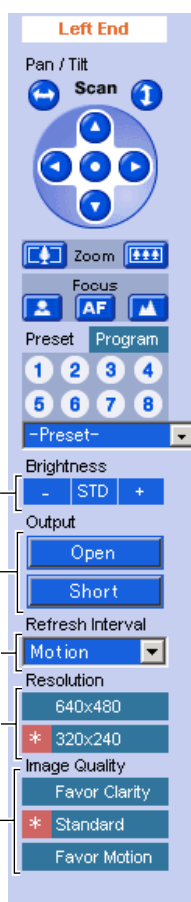
Pressing the **Zoom** buttons (4) will zoom in or out.

### (5) Focus Buttons:

Pressing the **Focus** buttons (5) will focus the camera.

### (6) Home Position, Alarm Position, Preset Position:

Pressing the **Home** button (6) will return the camera to the Home Position. Pressing the **Alarm** button (6) will return the camera to the Alarm Position. Pressing the **Preset** button (6) will return the camera to the Preset Position.



(7)

(8)

(9)

(10)

(11)

(7) **Brightness:**  $\frac{1}{2}$  ( ) 9

(8) **Output Control:** ( )

(9) **Refresh Interval:** ( ) 60

(10) **Resolution:** 640 480 320 240 ( )

(11) **Image Quality:** ( )

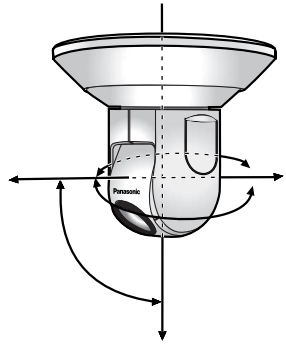
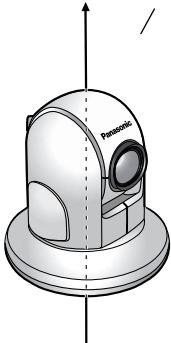
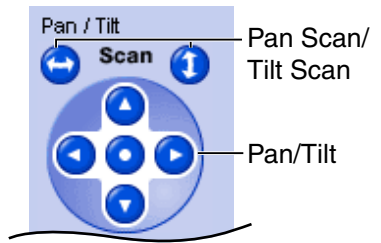
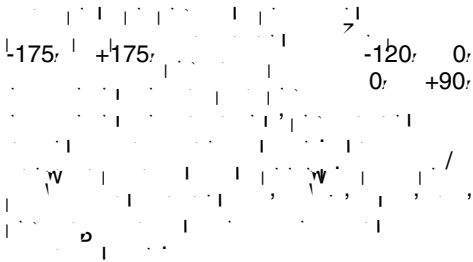
— Z ( )

— ( )

— Z ( )



Pan/Tilt Operation



Note





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## Note

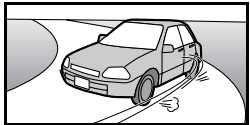
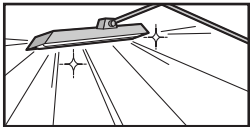
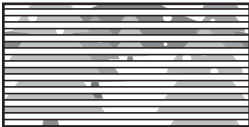
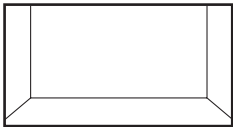
- (93). 10
- w
- w
- w
- w

# 1.5.6 Automatic and Manual Focusing



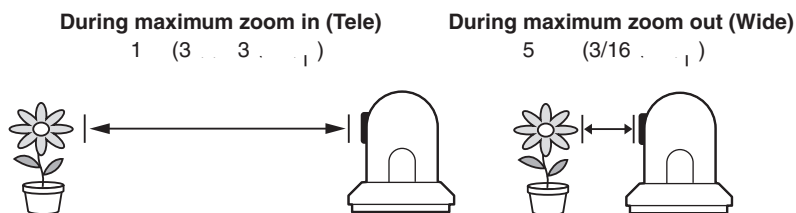
## Note

The objects that are difficult to focus on by AF button



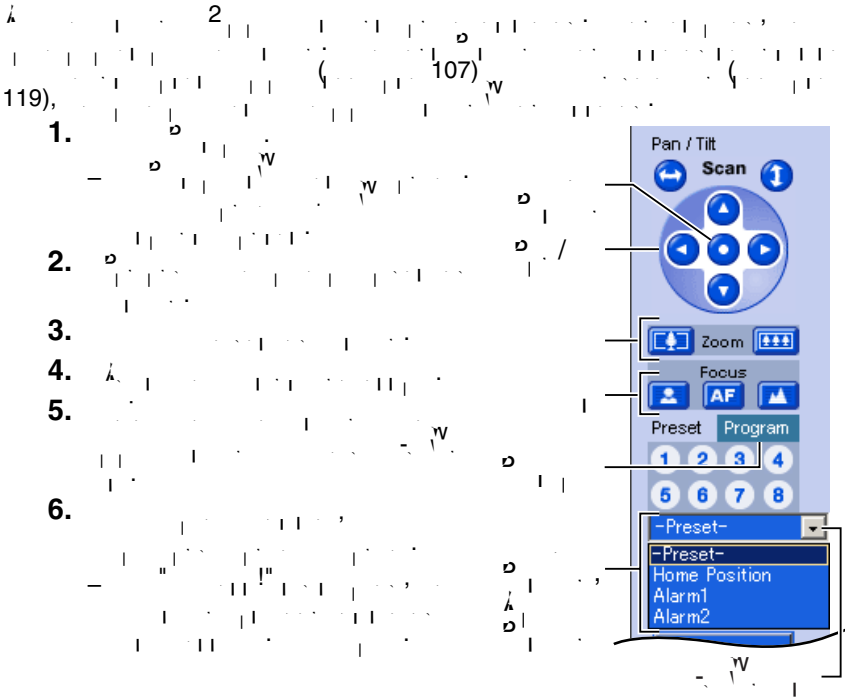
- The distance between the object and the camera is 10m (33ft).
- The distance between the object and the camera is 10m (33ft).
- The distance between the object and the camera is 10m (33ft).

### Minimum object distance



# 1.5.7 Setting Home Position/Alarm Position/Preset Position

## Registering Home Position/Alarm Position



## Registering a Preset Position

20  
( 33).

— w  
— w w

1.

— w  
— w w

2.

— w /

3.

— w

4.

— w

5.

— (1 8)  
— (1 20)

— w  
— w

— " " 1.

— (1

8),

— 15

— (

— 190

— & , < > , " ,

6.

— w

— " " ! " "

— w

— w

— w

— w

### Note

— w

— w

— w

— w

— w

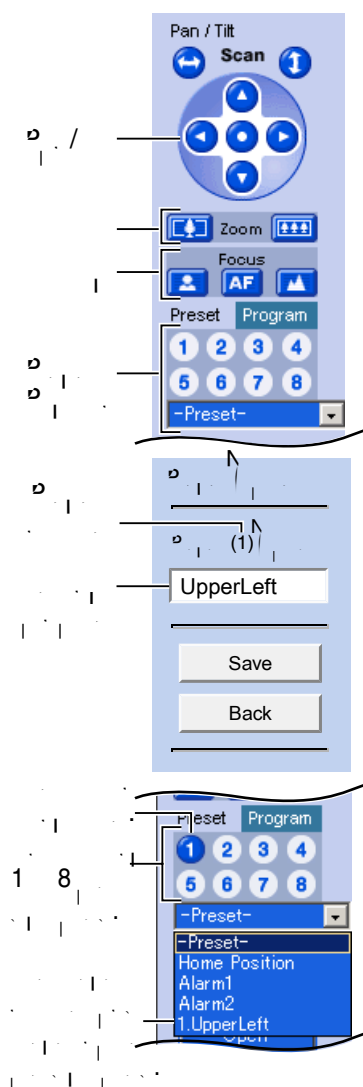
— w

— w

— w

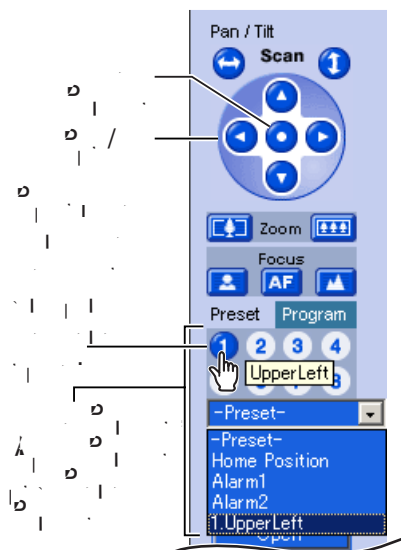
— w

— w



## Viewing the Image

1.





## Changing or Deleting the Settings

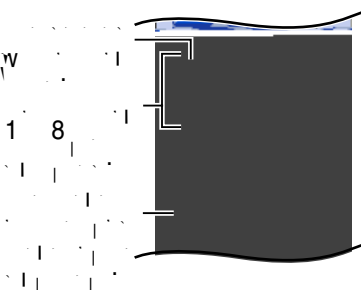
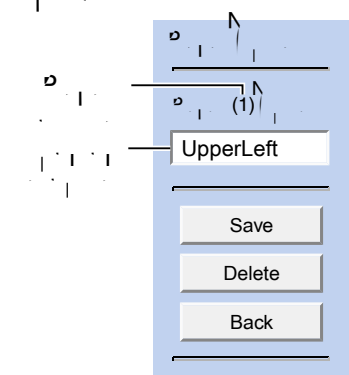
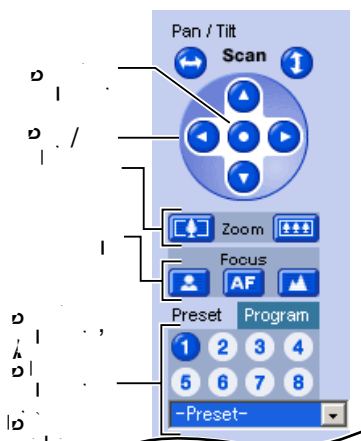
1. Press the **Scan** button.
2. Press the **Up** arrow button.
3. Press the **Left** arrow button.
4. Press the **Right** arrow button.
5. Press the **Down** arrow button.

### Note

6. Press the **Save** button.

### Note

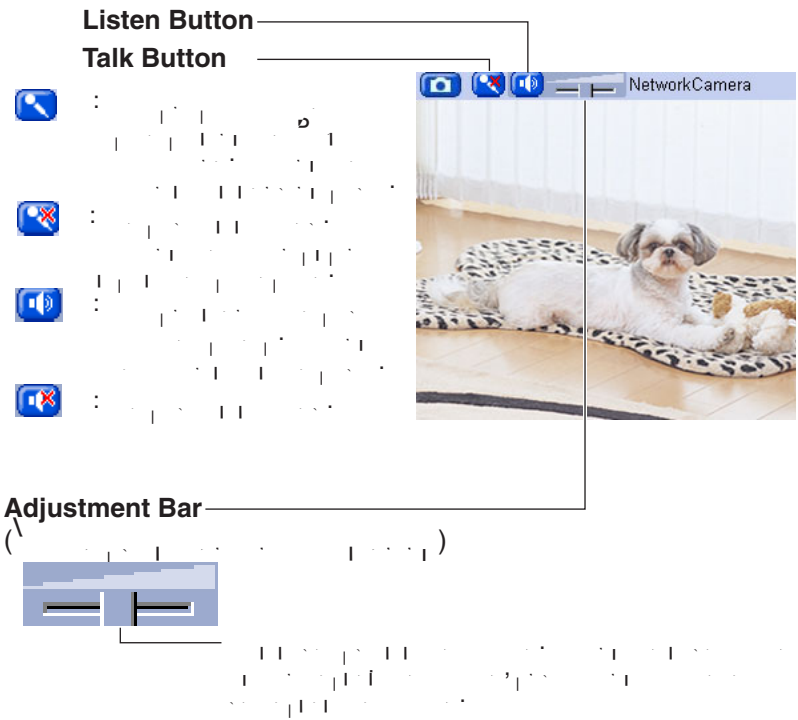
7. Press the **Delete** button.



# 1.6 Listening to Camera Audio and Talking through the Camera

1. Click the **Listen** button (Figure 13).
2. Click the **Talk** button (Figure 13).
3. Click the **Adjustment Bar** (Figure 13) to adjust the volume of the audio.

## Audio Feature



**Note**

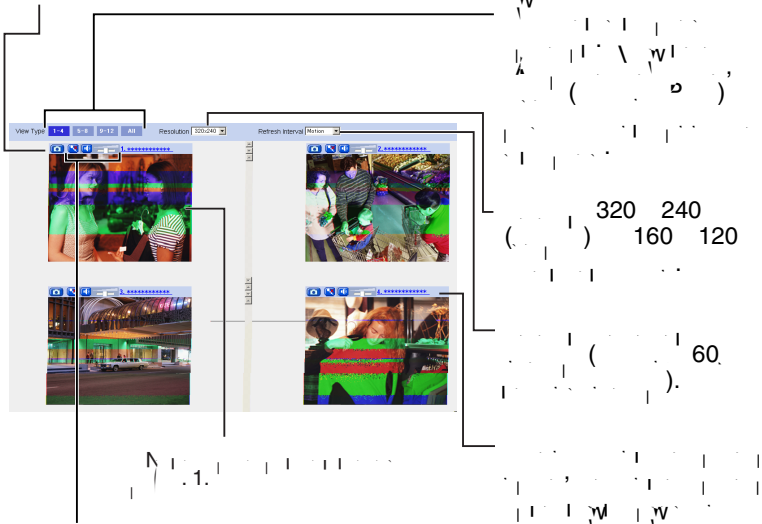
- [illegible]

# 1.7 Viewing the Multi-Camera page

- 1. Click on the Multi button (Figure 148).
- 2. Click on the Capture Image Button (Figure 22).



Capture Image Button (Figure 22)



Audio Control Bar (Talk button, Listen button and Adjustment Bar) (Figure 34)

- 3. Click on the Talk button (Figure 34).

Diagram illustrating a grid structure with points and arrows. The grid is bounded by a top line with points labeled 160 and 120, and a bottom line with points labeled 3 and 4. The left side has points labeled 640 and 480. The right side has points labeled 51 and 56. The bottom right has points labeled 93, 4, and 3. Arrows point from various points to others, and some points are labeled with letters like 'v' and 'p'.

—  $\mathcal{O}(1)$  (192.168.0.253)  $\mathcal{O}(1)$  (11)

—  $\mathcal{O}(1)$  (148).

—  $\mathcal{O}(1)$  (186).

[illegible][illegible]

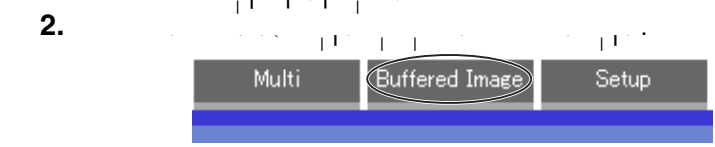
# 1.8 Viewing the Buffered Image page

Click the Buffered Image button (97, 107, 119).

**Note**

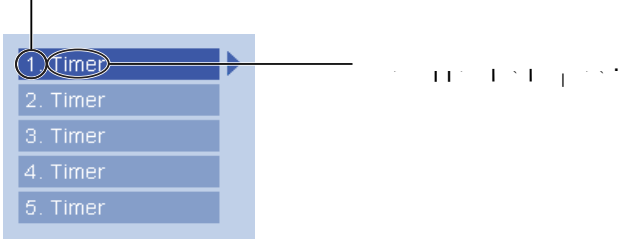
1. Click the Buffered Image button (97, 107, 119).

2. Click the Buffered Image button (97, 107, 119).

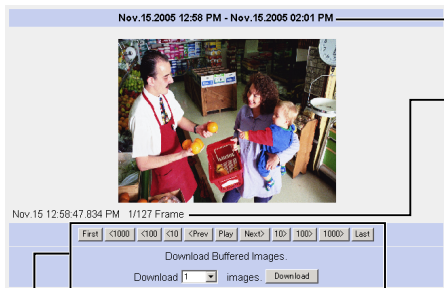


3. Click the Buffered Image button (97, 107, 119).

Click the Buffered Image button (97, 107, 119).



4.



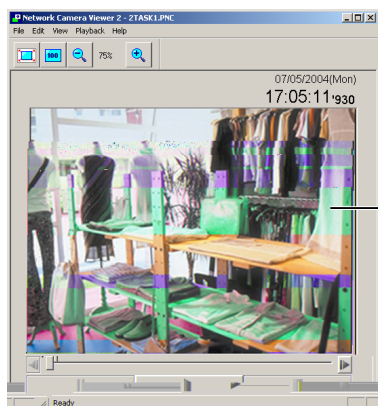
[Play]:

[<Prev] or [Next>]:

[First], [<1000], [<100], [<10] or [10>], [100>], [1000>], [Last]:

10 , 100 1000

[Download]







## 1.9 Viewing Still Images on Your Cell Phone

"http://IP address (or URL):Port Number/Mobile"

- 80 ( ),
- ://\*\*\*.\*\*\*.\*\*\*.\*\*\*:50000/  
( \*\*\*\*\*. :50000/ )
- 
- 
- ( )



Displays Up to 50  
Logs in order of  
time.

—(10)

—(11)

—(12)

—

—(13)

Display	Operation	Signal
A1 R	Alarm1	Rising: GND to Open (High)
A2 F	Alarm2	Falling: Open (High) to GND
MD	Motion Detection	-

(13)

---

- ( \*\*\*\*\*<sup>iv</sup> :50000/ )

- ( \*\*\*\*\*. ^v . :50000/ )

(4) (2) (8) (6)   
 (\*) (#)   
 "4"   
 (2) (8) (6)   
 (\*) (#)

<http://panasonic.co.jp/pcc/products/en/netwcam/>

## 1.9.1 Enabling or Disabling the Buffer/Transfer on your Cell Phone

1. Press the **Menu** key.
2. Press the **Left** key.
3. Press the **Left** key.

Buffer/Transfer

No.Status Trigger

(1) OFF Timer

(2) OFF Timer

(3) OFF Timer

(4) OFF Timer

(5) OFF Timer

[Control Page](#)

4. Press the **Left** key.

Buffer/Transfer

The 1st setting will be changed to ON.  
If you press [Save], all buffered images are deleted.

[Save](#) [Cancel](#)

No.(1)

Status:OFF -> ON

Trigger:Timer

Su Mo Tu We Th Fr Sa

Active:Always

No Transfer, No Memory

Overwrite

Notify :-

# 2 Using the Camera's Basic Features

## 2.1 Setup Page of the Camera

1. Click the **Setup** button (Figure 13).

### Note

- 1. The camera's default IP address is 192.168.1.10. If you want to change the IP address, click the **Static** button in the **Connection Mode** section.
- 2. The camera's default port is 80. If you want to change the port, click the **Dynamic DNS** button in the **Connection Mode** section.
- 3. The camera's default user name is admin. If you want to change the user name, click the **General User** button in the **Account** section.
- 4. The camera's default password is 123456. If you want to change the password, click the **General User** button in the **Account** section.

2.

Top

Single

Multi

Buffered Image

Setup

Maintenance

Support

(1) Basic

(2) Network(IPv4)

(3) Network(IPv6)

(4) P2P

(5) Dynamic DNS

(6) Date and Time

(7) Camera

(8) Audio

(9) Account

(10) Administrator

(10) General User

(11) Buffer/Transfer

(12) Trigger

(12) Motion Detection

(13) Alarm Log

(14) Advanced

(15) Image Display

(16) Multi-Camera

(16) Operation Time

(17) External Output

(18) Indicator Control

Network(IPv4)

Set up network configuration.  
Select "Automatic Setup" if you connect the camera to the router and wish to set it up automatically.  
Select "Static" if you wish to assign a static IP address to the camera.  
Select "DHCP" if you are using the DHCP function of your router or ISP.

Connection Mode

Connection Mode	Current Setting	
Automatic Setup	X	Configure network settings automatically
Static		Assign static IP address to the camera.
DHCP		Get IP address from DHCP server

## Basic

- (1) Network (IPv4)  $\mathcal{N}_4$  (48).
- (2) Network (IPv6)  $\mathcal{N}_6$ .



## 2.2 Connecting the Camera to Your IPv4 Network

- 1.
- 2.

Connection Mode	
Connection Mode	Current Setting
<a href="#">Automatic Setup</a>	<input type="text"/>
<a href="#">Static</a>	<input type="text"/>
<a href="#">DHCP</a>	<input type="text"/>

- 3.

### Automatic Setup

Allow Access from the Internet	
<input type="radio"/> Yes	
<input checked="" type="radio"/> No	
Max. Bandwidth Usage	
Unlimited	
Connection Type	
Auto Negotiation	
Save Cancel	



## DHCP Setup

<b>Network Configuration from Setup Program</b>	
<input checked="" type="checkbox"/> Enable	
<b>Internet Connection</b>	
Port No.	80
Host Name	
<b>Default Gateway</b>	
Default Gateway	
<b>DNS</b>	
DNS Server 1	
DNS Server 2	
<b>Max. Bandwidth Usage</b>	
Unlimited	
<b>Connection Type</b>	
Auto Negotiation	
<input type="button" value="Save"/> <input type="button" value="Cancel"/>	

## Static Setup

<b>Network Configuration from Setup Program</b>	
<input checked="" type="checkbox"/> Enable	
<b>Internet Connection</b>	
Port No.	80
IP Address	192.168.0.253
Subnet Mask	255.255.255.0
<b>Default Gateway</b>	
Default Gateway	
<b>DNS</b>	
DNS Server 1	
DNS Server 2	
<b>Max. Bandwidth Usage</b>	
Unlimited	
<b>Connection Type</b>	
Auto Negotiation	
<input type="button" value="Save"/> <input type="button" value="Cancel"/>	

4.

### New settings are saved.

New settings are saved. Please restart the camera.

Note: (1) All the buffered images will be erased when restarted.

(2) Please use Setup Program to find out the camera on your network when you select "Automatic Setup" or "DHCP".

### Note

5.

### Note

180).

Setting	Description
(k)	80 50000 50050
( / )	
( / )	80. 68 2.7.2 ( 4 )". p: 20 21, : 23, p: 25, : 53, p3: 110, p : 443, : 4000 6661 6667. 1 65535. 80. 4
( )	179). 4 ( 255) 3 "192.168.0.253". "0.0.0.0" "255.255.255.255"

Setting	Description
( )	190). , , & , < , > ,
( / )	4. (R 255) 3 "192.168.0.253". "0.0.0.0" "255.255.255.255"
( / )	4. (R 255) 3 "192.168.0.253". "0.0.0.0" "255.255.255.255"
	0.1 4 6. <b>Note</b> 160 120 3.5 (28 ) 320 240 10 (80 ) 640 480 18 (144 )

Setting	Description
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6	6

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## 2.3 Connecting the Camera to Your IPv6 Network

### Note

- 1.
- 2.

Connection Mode	
Connection Mode	Current Setting
<a href="#">Automatic Setup</a>	
<a href="#">Static</a>	

- 3.

### Automatic Setup

<b>Allow Access from the Internet</b>	
<input type="radio"/> Yes	
<input checked="" type="radio"/> No	
<b>DNS</b>	
DNS Server 1	
DNS Server 2	
<b>Max. Bandwidth Usage</b>	
Unlimited	
<b>Connection Type</b>	
Auto Negotiation	
Save Cancel	

Static Setup

Allow Access from the Internet

☐ Yes

☒ No

Internet Connection

Port No.

80

IP Address

Default Gateway

Default Gateway

DNS

DNS Server 1

DNS Server 2

Max. Bandwidth Usage

Unlimited

Connection Type

Auto Negotiation

Save

Cancel

4.

New settings are saved.


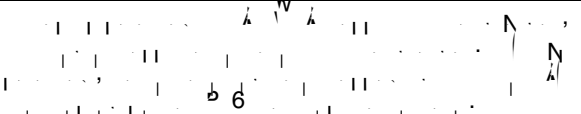
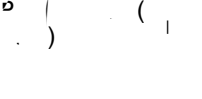
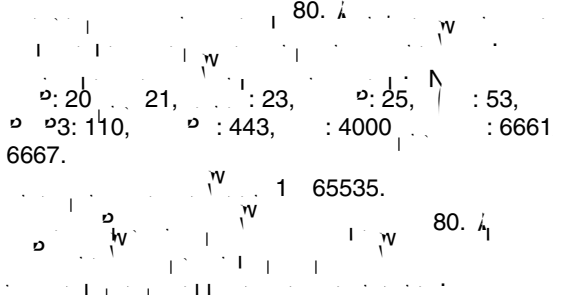
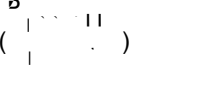
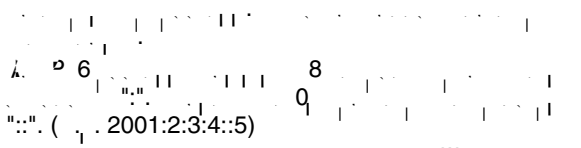
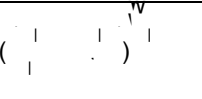
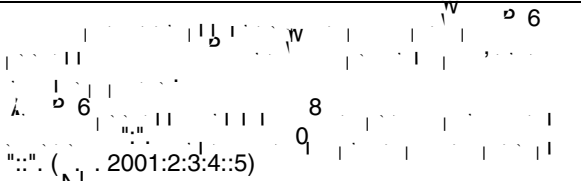
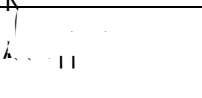
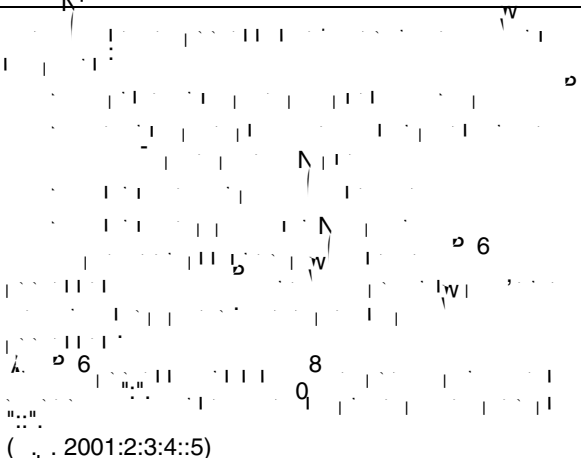
New settings are saved. Please restart this product.  
**Note:** All the buffered images will be erased when restarted.

Restart

Note

5.

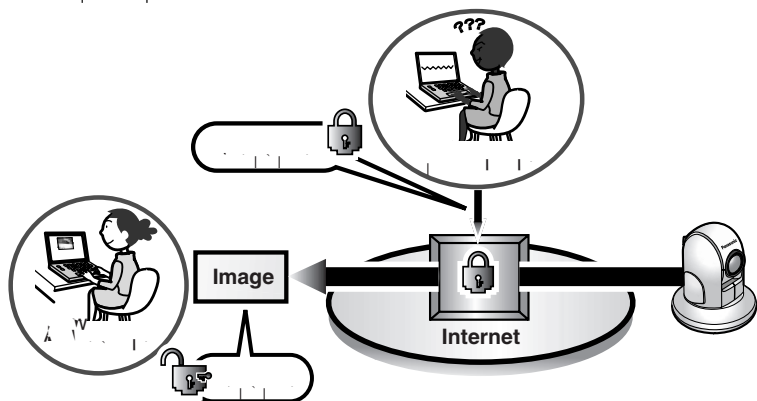
Note

Setting	Description
	
	
	
	
	

Setting	Description
	<p>0.1</p> <p>4 6.</p> <p><b>Note</b></p> <p>160 120 : 3.5 (28 )</p> <p>320 240 : 10 (80 )</p> <p>640 480 : 18 (144 )</p>
	<p>9</p> <p>4 6.</p>



## 2.4 What is IPsec?



### Camera's IPsec Features

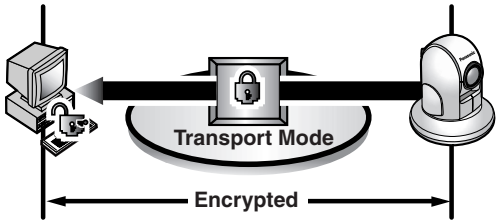
Item	Supported Feature
1	<ul style="list-style-type: none"> <li>1. Authentication: *1</li> <li>2. Encryption: 3 - , k - (128, 192, 256)</li> <li>5, k - k-1</li> </ul>
	<ul style="list-style-type: none"> <li>( )<sup>*2</sup></li> <li>3 - , k - (128, 192, 256)</li> <li>5-96, k - k-1-96</li> </ul>

\*1

\*2

IPsec Mode Selection

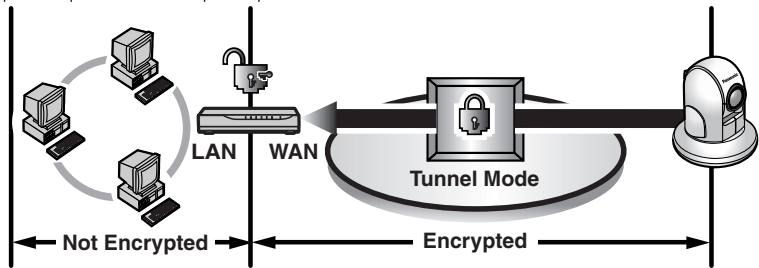
Transport Mode (IPv4 Only)



Item	Supported Feature
	<p>6.0</p> <p><b>Note</b></p> <p><a href="http://panasonic.co.jp/pcc/products/en/netwkcam/">http://panasonic.co.jp/pcc/products/en/netwkcam/</a></p>

Tunnel Mode (IPv4/IPv6)

**Note**



Item	Supported Feature
	2000, 98 (4) 1 (6) 6.0
	(4) (6) <b>Note</b> <a href="http://panasonic.co.jp/pcc/products/en/netwkcaml/">http://panasonic.co.jp/pcc/products/en/netwkcaml/</a>
	(4) (6) (4/6) (6)

# 2.5 Encrypting the Camera Image in Transport Mode

**Note**

- 1. Camera
- 2. No.

137)

Transport

If you use transport mode in E-mail or FTP transfer, click No. in the Buffer/transfer column.

No.	Status	Web Access	HTTP	Any	Ahead connecting
Camera	OFF				

Buffer/transfer

No.	Status	Ahead connecting
1	OFF	
2	OFF	
3	OFF	
4	OFF	
5	OFF	

The notice of an worm bo.

No.	Status	Ahead connecting
1	OFF	

131).

**Note**

- 1, 2
- 3.

Transport setting

Status

☐ ON

Pre-Shared Key  
(1 to 63 Characters)

Retype Pre-Shared  
Key

Save

Cancel

60

Setting	Description
<p> <input type="checkbox"/> </p>	<p>           If you select this option, the system will automatically generate a new key for the IPsec tunnel. If you clear this option, the system will use the existing key for the IPsec tunnel.         </p> <p> <b>Note</b> </p> <p>           If you select this option, the system will automatically generate a new key for the IPsec tunnel. If you clear this option, the system will use the existing key for the IPsec tunnel.         </p>

4. Click **OK**.
5. Click **OK**.
6. Click **OK**.

IPsec

Check the box to enable IPsec features. If you clear the box, whole IPsec features will be invalid.

☒ Use

Encoding strength

Encoding strength for IPsec can be selected. If you select[Standard], DES or NULL is valid as an algorithm, and then the data will become easier to be decrypted.

☒ Standard (AES,3DES,DES, NULL)
 ☐ High (AES,3DES)

Save

Setting	Description
<p> <input type="checkbox"/> </p>	<p>           If you select this option, the system will automatically generate a new key for the IPsec tunnel. If you clear this option, the system will use the existing key for the IPsec tunnel.         </p>
<p> <input type="checkbox"/> </p>	<p>           If you select this option, the system will automatically generate a new key for the IPsec tunnel. If you clear this option, the system will use the existing key for the IPsec tunnel.         </p>

- 7.
8. 58.
9. ( 13).

#### **Note**

24

<http://panasonic.co.jp/pcc/products/en/netwkcaml>

## 2.6 Encrypting the Camera Image in Tunnel Mode

**Note**

- The camera image is encrypted in Tunnel Mode.
  - The camera image is encrypted in Tunnel Mode.
  - The camera image is encrypted in Tunnel Mode.
1. The camera image is encrypted in Tunnel Mode.
  2. **Add** .

Tunnel

To add IPsec settings, click "Add". To edit your settings, click the corresponding No.

No.	Status	Ahead connecting
<a href="#">Add</a>		

3. The camera image is encrypted in Tunnel Mode.

Tunnel setting

Status

☒ ON

Pre-Shared Key  
(1 to 63 Characters)

Retype Pre-Shared  
Key

Network address

Router address

Save

Cancel

Setting	Description

Setting	Description
<p> <input type="checkbox"/> <b>Use</b> </p>	<p>           If you check this box, the system will use the specified IPsec settings. If you uncheck this box, the system will use the default settings.         </p> <p> <b>Note</b> </p> <p>           The system will use the specified IPsec settings only when the system is in the "On" state.         </p>
<p> <input type="checkbox"/> <b>Use</b> </p>	<p>           If you check this box, the system will use the specified IPsec settings. If you uncheck this box, the system will use the default settings.         </p> <p> <b>Note</b> </p> <p>           The system will use the specified IPsec settings only when the system is in the "On" state.         </p>
<p> <input type="checkbox"/> <b>Use</b> </p>	<p>           If you check this box, the system will use the specified IPsec settings. If you uncheck this box, the system will use the default settings.         </p> <p> <b>Note</b> </p> <p>           The system will use the specified IPsec settings only when the system is in the "On" state.         </p>

4. ☐ **Use**
5. ☐ **Use**
6. ☐ **Use**

IPsec

Check the box to enable IPsec features. If you clear the box, whole IPsec features will be invalid.

☒ Use

Encoding strength

Encoding strength for IPsec can be selected. If you select[Standard], DES or NULL is valid as an algorithm, and then the data will become easier to be decrypted.

☒ Standard (AES,3DES,DES, NULL)

☐ High (AES,3DES)

Save











Setting	Description
0	0

7.

8.

IKE Items		Settings
0	1	0
		*
		1 2.
		(128, 192, 256).
		5, -1
		28800, ( )
0	2	
		2. 1
		(128, 192, 256)
		5-96, -1-96
		28800, ( )

\*1

Items	Settings
	
	
	
	

## 9. ( 13).

### Note

<http://panasonic.co.jp/pcc/products/en/netwkcaml>

# 2.7 Using UPnP™ (Universal Plug and Play)

panasonic.co.jp/pcc/products/en/netwkcaml

## Note

- 1.
- 2.
- 3.
- 4.
- 5.
- 6.

Auto Port Forwarding

☐ Enable
 ☒ Disable

Display Shortcut Icon in My Network Places

☒ Enable
 ☐ Disable

Save

Setting	Description
	<p><b>Note</b></p> <p>(50).</p>
	<p><b>Note</b></p> <p>(189).</p>

- 3.
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- 98.
- 99.
- 100.

4.

## 2.7.1 Connecting the Camera to a Router that Supports UPnP™ (IPv4 Only)

### Note

<http://panasonic.co.jp/pcc/products/en/netwkcam/>

## 2.7.2 Connecting the Camera to a Router that Does Not Support UPnP™ (IPv4 Only)

1.

- (1) ( 4).
- (2)
- (3)

### Note

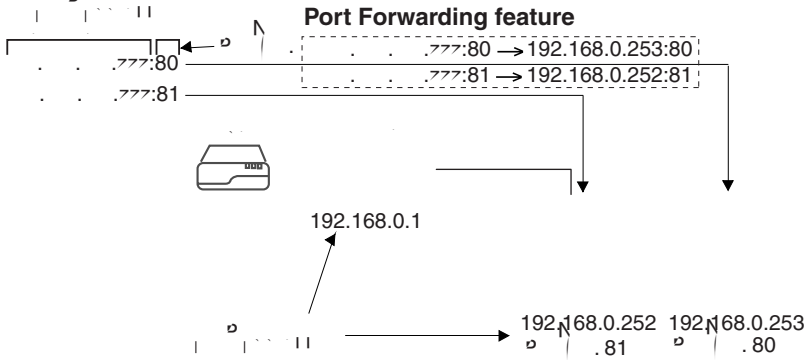
- (4)
- (5)

2.

1-(3),

3.

# Port Forwarding feature\*1 (IPv4 Only)



## Note

---

## 2.8 Registering with the DynamicDNS Service

<http://www.viewnetcam.com>

3.

Viewnetcam.com configuration

Personal (Camera) URL	
Your Account Link	

Save

Cancel

Setting	Description
Personal (Camera) URL	Personal (Camera) URL is the URL of the camera that you want to use. It is the URL that you enter in the "Personal (Camera) URL" field of the Viewnetcam.com configuration window.
Your Account Link	Your Account Link is the link to your account on Viewnetcam.com. It is the link that you enter in the "Your Account Link" field of the Viewnetcam.com configuration window.

4.

5.

6.

**Your Account Link.**

**Note**

- (1) Personal (Camera) URL is the URL of the camera that you want to use. It is the URL that you enter in the "Personal (Camera) URL" field of the Viewnetcam.com configuration window.
- (2) Your Account Link is the link to your account on Viewnetcam.com. It is the link that you enter in the "Your Account Link" field of the Viewnetcam.com configuration window.

- Personal (Camera) URL is the URL of the camera that you want to use. It is the URL that you enter in the "Personal (Camera) URL" field of the Viewnetcam.com configuration window.
- Your Account Link is the link to your account on Viewnetcam.com. It is the link that you enter in the "Your Account Link" field of the Viewnetcam.com configuration window.

7. Click **DynamicDNS**.
8. Click **User-specified DynamicDNS** (Figure 13).

### Note

- If you select **DynamicDNS**, you must enter a domain name (Figure 30).
- If you select **User-specified DynamicDNS**, you must enter a domain name and a user name (Figure 41).

### Confirming Internet access

1. Click **Test Internet Access** (Figure 13).
2. Click **OK** (Figure 41).

### When you select [User-specified DynamicDNS]

2. Click **User-specified DynamicDNS** (Figure 13).

- If you select **User-specified DynamicDNS**, you must enter a domain name and a user name (Figure 41).



3.

User-specified DynamicDNS

DynamicDNS Server URL  
(1 to 255 Characters)

Updating time

10 min

Input User Name and Password

User Name  
(0 to 63 Characters)

Password  
(0 to 63 Characters)

Save

Cancel

- Select the DynamicDNS Server URL (1 to 255 Characters).
- Select the Updating time (10 min).

Setting	Description
*1	DynamicDNS Server URL (1 to 255 Characters)
*2	User Name (0 to 63 Characters)
*2	Password (0 to 63 Characters)

- \*1 Select the DynamicDNS Server URL (1 to 255 Characters).
- \*2 Select the User Name (0 to 63 Characters) and Password (0 to 63 Characters).

4.

- Select the DynamicDNS Server URL (1 to 255 Characters).
- Select the Updating time (10 min).

5.

- Select the User Name (0 to 63 Characters) and Password (0 to 63 Characters).

**Note**

- The DynamicDNS Server URL must be a valid URL.
- The User Name and Password must be valid.

---

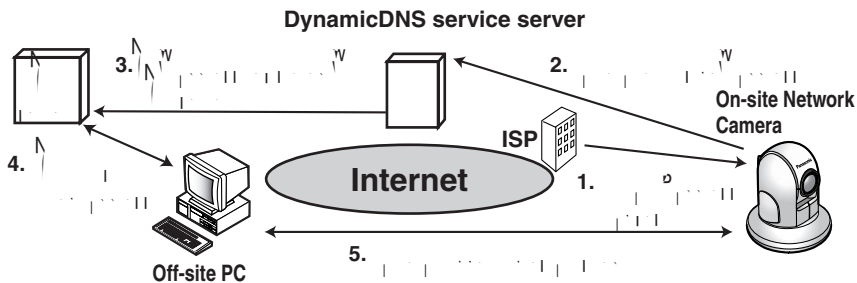
## Confirming Internet access

- **Internet access** is confirmed by the presence of the **Internet** icon in the **System tray** (13)
- **Internet access** is confirmed by the presence of the **Internet** icon in the **System tray** (41)

## 2.8.1 DynamicDNS Service (IPv4/IPv6)

What are the advantages of DynamicDNS service?

How the DynamicDNS service works



1.

2.

3.

4.

5.

**Note**

- 80: [http://\(Cameraname\).viewnetcam.com](http://(Cameraname).viewnetcam.com)
  - : [http://\(Cameraname\).viewnetcam.com:Port](http://(Cameraname).viewnetcam.com:Port)
- Number

## 2.9 Setting the Date and Time

**Note**

1. Click **Time Setting**.
2. Click **Automatic Time Adjustment**.

Time Setting

Date

MonthJunDay1Year05

Format

AM/PM24H

Time

Hour7Minute0PM

Automatic Time Adjustment

☐ Enable

NTP Server Address or Host Name

Time Zone

GMT-05:00 Eastern Time

Adjust Clock for Daylight Saving Time

☐ Enable

Start Day:

MonthAprWeekdayFirst SundayHour2AM

End Day:

MonthOctWeekdayLast SundayHour2AM

Save

Cancel

77

Setting	Description
	<p>( / 24 ).</p> <p>24</p>
	<p>(</p> <p>255) 3 "192.168.0.253". (0</p> <p>"0.0.0.0" "255.255.255.255" b 6,</p> <p>8 "2001:2:3:4::5" 0</p> <p>(1 255 ).</p> <p><b>Note</b></p>
	<p><b>Note</b></p>

- 3.
- -

4.

- [illegible]

**Note**

- [illegible]

# 2.10 Changing Camera Settings

- 1.
- 2.

Camera Name

Camera Name

NetworkCamera

White Balance

White Balance

Auto

AC Power Source Frequency

☐ 50Hz

☒ 60Hz

Automatic Focus Range

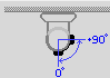
Automatic Focus Range

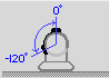
Macro

Mounting type

☒ On the ceiling

☐ On the table





Pan Range

Minimum

-175

degrees

Home Position

0

degrees

Maximum

+175

degrees

Tilt Range

Minimum

-120

degrees

Home Position

-90

degrees

Maximum

0

degrees

Return to Specified Position

Time

Do not move

Specified Position

Home Position

Color Night View

☐ Enable

☒ Disable

Vertical Resolution (for 640 x 480 mode)

☒ 480 (Better for still images)

☐ 240 (Better for motion images)

Save

Cancel







[illegible]
$$= \frac{1}{\sqrt{\pi}} \int_{-\infty}^{\infty} e^{-\frac{1}{2}\lambda^2} d\lambda = 1 \quad (1-20)$$

Figure 1 consists of four sub-diagrams labeled (a), (b), (c), and (d), each showing a neutrino ( $\nu$ ) interacting with a nucleon ( $N$ ).  
 (a) A neutrino ( $\nu$ ) emits a  $W^+$  boson and becomes an antilepton ( $\bar{l}$ ). The  $W^+$  boson interacts with a nucleon ( $N$ ) via a  $W^+$  exchange, resulting in a lepton ( $l$ ) and a nucleon ( $N$ ).  
 (b) A neutrino ( $\nu$ ) emits a  $Z^0$  boson and remains a neutrino ( $\nu$ ). The  $Z^0$  boson interacts with a nucleon ( $N$ ) via a  $Z^0$  exchange, resulting in a nucleon ( $N$ ).  
 (c) A neutrino ( $\nu$ ) emits a  $W^-$  boson and becomes a lepton ( $l$ ). The  $W^-$  boson interacts with a nucleon ( $N$ ) via a  $W^-$  exchange, resulting in an antilepton ( $\bar{l}$ ) and a nucleon ( $N$ ).  
 (d) A neutrino ( $\nu$ ) emits a  $Z^0$  boson and remains a neutrino ( $\nu$ ). The  $Z^0$  boson interacts with a nucleon ( $N$ ) via a  $Z^0$  exchange, resulting in a nucleon ( $N$ ).

Figure 1: Schematic representation of the experimental design. The figure shows a sequence of events for two groups: 'Control' and 'Experimental'. For the Control group, the sequence is: '640' (with a downward arrow), '480' (with a downward arrow), '240' (with a downward arrow), and 'v' (with a downward arrow). For the Experimental group, the sequence is: '640' (with a downward arrow), '480' (with a downward arrow), '240' (with a downward arrow), and 'v' (with a downward arrow). The 'v' is enclosed in a box. The entire sequence is enclosed in a large box labeled 'v'.

[illegible]

3.

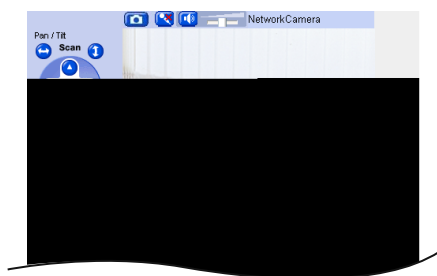
4.



## Specifying the Pan/Tilt Range

1.

2.

3.

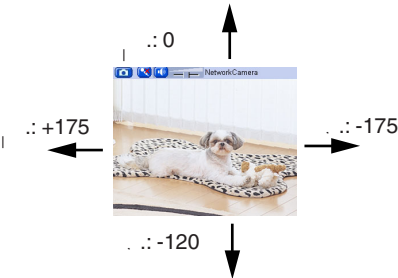


<b>Camera Name</b>		
Camera Name	NetworkCamera	
<b>White Balance</b>		
White Balance	Auto	
<b>AC Power Source Frequency</b>		
<input type="radio"/> 50Hz <input checked="" type="radio"/> 60Hz		
<b>Automatic Focus Range</b>		
Automatic Focus Range	Macro	
<b>Mounting type</b>		
<input checked="" type="radio"/> On the ceiling <input type="radio"/> On the table		
 		
<b>Pan Range</b>		
Minimum	Home Position	Maximum
-175 degrees	0 degrees	+175 degrees
<b>Tilt Range</b>		
Minimum	Home Position	Maximum
-120 degrees	-90 degrees	0 degrees
<b>Return to Specified Position</b>		
Time	Do not move	
Specified Position	Home Position	
<b>Color Night View</b>		
<input type="radio"/> Enable <input checked="" type="radio"/> Disable		
<b>Vertical Resolution (for 640 x 480 mode)</b>		
<input checked="" type="radio"/> 480 (Better for still images) <input type="radio"/> 240 (Better for motion images)		
<input type="button" value="Save"/> <input type="button" value="Cancel"/>		

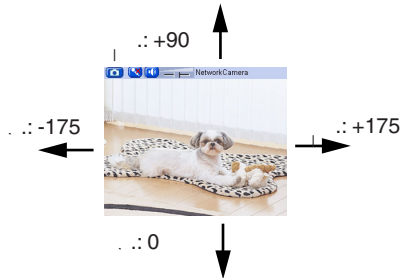
4.

**Note**

When the camera is mounted on a table



When the camera is mounted on a ceiling



5.

## 2.11 Adjusting Audio

1. Click **Audio** in the left sidebar.
2. Click **Audio Settings** in the top right corner.

Output

☒ Enable

☐ Disable

Volume

Standard

PC Audio Input Timeout

1 min

Input

☒ Enable

☐ Disable

Camera Microphone Sensitivity

Standard

Mute during Pan/Tilt

☒ Enable

☐ Disable

Save

Cancel

Setting	Description
Output	Whether to enable or disable the audio output.
Volume	Audio output volume. (1 ~ 60)
PC Audio Input Timeout	PC audio input timeout. (1 ~ 60)
Input	Whether to enable or disable the audio input.
Camera Microphone Sensitivity	Camera microphone sensitivity. (Standard)
Mute during Pan/Tilt	Whether to mute the audio during pan/tilt.

Setting	Description
<p> <math>\sigma</math> / </p>	<p> <math>w</math> </p>

- 3.
- -
- 4.
-

## 3 Registering Users

### 3.1 Changing the Authentication Setting and Administrator User Name and Password

1. Log on to the system as Administrator.

2. Click **System** > **System Settings** > **Authentication**.

#### Note

- The administrator user name and password can be changed only when the authentication type is set to Local.
- The administrator user name and password can be changed only when the authentication type is set to Local.
- The administrator user name and password can be changed only when the authentication type is set to Local.

#### IMPORTANT

- The administrator user name and password can be changed only when the authentication type is set to Local.



1. Click **General Authentication**.
2. Click **Administrator Authentication**.

General Authentication

☐ Permit access from guest users
 ☐ Permit access from guest users (mobile only)
 ☒ Do not permit access from guest users

Administrator Authentication

User Name  
(6 to 15 Characters)

Password  
(6 to 15 Characters)

Retype Password

Save

Cancel

Setting	Description
	<p>3</p> <p>Note</p> <p>Support</p> <p>Login</p>



Administrator/General Users/Guest Users

Items	Administrator	General Users	Guest Users	Guest Users (mobile only)
	1	50		

Note

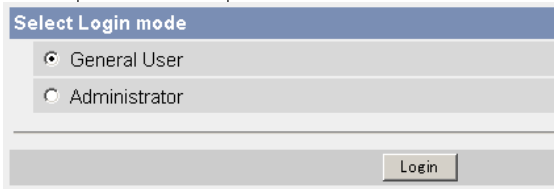
- (88)

## 3.2 Logging in to the Camera

1.

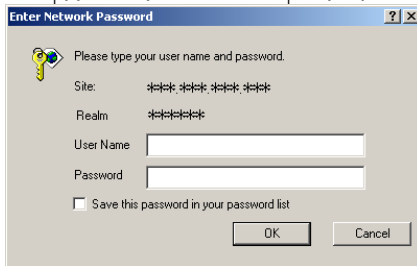


2.



### Note

When logging in to the camera, you must enter the correct user name and password. If you enter an incorrect user name or password, the camera will display an error message.



3.

After you click the OK button, the camera will display the following message:

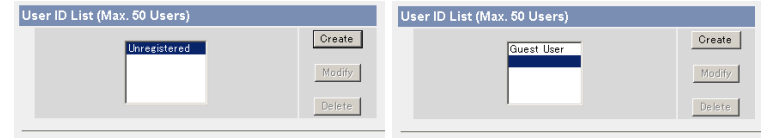
### 3.3 Creating, Modifying or Deleting General Users

50 ( ) : A

**Note**

- 1.
- 2.

( )



- 
-

3.

Input User Name and Password

User Name  
(6 to 15 Characters)

Password  
(6 to 15 Characters)

Retype Password

Access Level

Limit time of Continuous Motion JPEG

Not permitted

Refresh Interval

3 s

☐ Pan / Tilt Control

☐ Zoom Control

☐ Focus Control

☐ Preset Control

☐ Click to Center Control

☐ Brightness Control

☐ External Output Control

☐ Change Refresh Interval

☐ Change Resolution

☐ Change Quality

☐ Capture Image Button

☐ Listen

☐ Talk

☐ View Multi-Camera page

☐ View Buffered Image page

Save

Cancel

Access Level

Limit time of Continuous Motion JPEG

Not permitted

Refresh Interval

3 s

☐ Pan / Tilt Control

☐ Zoom Control

☐ Focus Control

☐ Preset Control

☐ Click to Center Control

☐ Brightness Control

☐ External Output Control

☐ Change Refresh Interval

☐ Change Resolution

☐ Change Quality

☐ Capture Image Button

☐ Listen

☐ Talk

☐ View Multi-Camera page

☐ View Buffered Image page

Save

Cancel

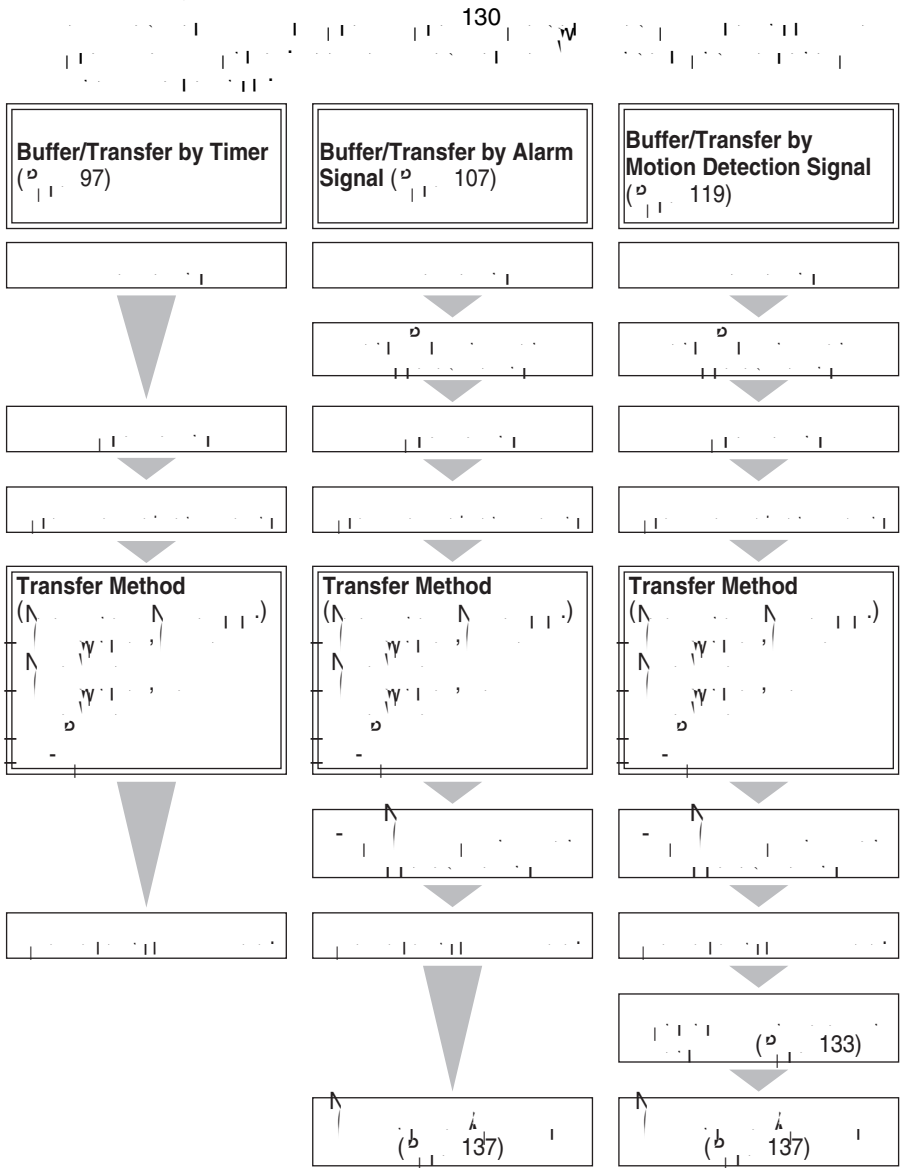
Setting	Description
	50
	(6 15):
	(6 15):
	Note
	190).
	" , , & , < , > :

Setting	Description
1	<p>1</p> <p>10 60</p> <p>3 60</p> <p>25)</p> <p>26)</p> <p>28)</p> <p>23)</p> <p>21)</p> <p>24)</p> <p>24)</p> <p>24)</p> <p>24)</p> <p>22)</p> <p>34)</p> <p>36)</p> <p>38)</p>

- 4.
- 5.

# 4 Buffering or Transferring Images

## 4.1 Procedures of Buffering or Transferring Images





# 4.2 Buffering or Transferring Images by Timer

**Note**

- 1.
- 2. No.

Trigger												
No.	Status	Trigger	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Active Time of Trigger	Transfer Method	Notify
1	OFF	Timer	X	X	X	X	X	X	X	Always	No Transfer, No Memory Overwrite	-
2	OFF	Timer	X	X	X	X	X	X	X	Always	No Transfer, No Memory Overwrite	-
3	OFF	Timer	X	X	X	X	X	X	X	Always	No Transfer, No Memory Overwrite	-
4	OFF	Timer	X	X	X	X	X	X	X	Always	No Transfer, No Memory Overwrite	-
5	OFF	Timer	X	X	X	X	X	X	X	Always	No Transfer, No Memory Overwrite	-

- 3.

Trigger Setting

☒ Enable Image Buffer/Transfer

Trigger

Timer

Delete Buffered Images

Next >

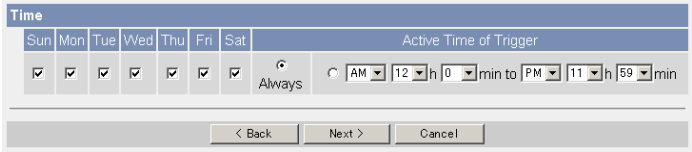
Save

Cancel

**Note**

Setting	Description

Setting	Description
1	2

4. 

**Note**

77).

Setting	Description

5. 

<

## Setting

## Description

160 120 (640 480, 320 240 ( ) )

6. 160 120 (640 480, 320 240 ( ) )

### Note

6. 640 480

< 160 120 (640 480, 320 240 ( ) )

### Note

160 120 (640 480, 320 240 ( ) )

## Setting

## Description

160 120 (640 480, 320 240 ( ) )

7.

Transfer Method

☒ No Transfer, No Memory Overwrite

☐ No Transfer, Memory Overwrite

☐ FTP

☐ E-mail

< Back

Next >

Cancel

**Note**

Setting	Description
Transfer Method	Specifies the method used to transfer data from the device to the computer. The default is No Transfer, No Memory Overwrite.
Transfer Method	Specifies the method used to transfer data from the device to the computer. The default is No Transfer, No Memory Overwrite.
Transfer Method	Specifies the method used to transfer data from the device to the computer. The default is No Transfer, No Memory Overwrite.
Transfer Method	Specifies the method used to transfer data from the device to the computer. The default is No Transfer, No Memory Overwrite.

## When you set [FTP] for Transfer Method

FTP	
Server IP Address or Host Name	<input type="text"/>
Port No. (Usually Use 21)	<input type="text" value="21"/>
Login ID (0 to 63 Characters)	<input type="text"/>
Password (0 to 63 Characters)	<input type="password"/>
Login Timing	<input type="text" value="Every Time"/>
Upload File Name (1 to 234 Characters)	<input type="text"/>
Overwrite setting	<input type="text" value="Overwrite File"/>
Data Transfer Method	<input type="text" value="Passive Mode"/>
<input type="button" value="Back"/> <input type="button" value="Save"/> <input type="button" value="Cancel"/>	

Setting	Description
Server IP Address or Host Name	Enter the IP address of the FTP server. (0 to 255) Example: "192.168.0.253" or "0.0.0.0" (1)
Port No. (Usually Use 21)	Enter the port number of the FTP server. (1 to 65535) Example: 21
Login ID (0 to 63 Characters)	Enter the login ID of the FTP server. (0 to 63 characters)
Password (0 to 63 Characters)	Enter the password of the FTP server. (0 to 63 characters)
Login Timing	Enter the login timing of the FTP server. (1 to 234 characters)
Upload File Name (1 to 234 Characters)	Enter the upload file name of the FTP server. (1 to 234 characters)
Overwrite setting	Enter the overwrite setting of the FTP server. (Overwrite File)
Data Transfer Method	Enter the data transfer method of the FTP server. (Passive Mode)

Setting	Description
	<p>20050101093020500.</p> <p>"9 30 20 500</p> <p>1, 2005".</p>

- \*1 | " , , & , < > .
- \*2 | " .

## When you set [E-mail] for Transfer Method

E-mail Transfer	
SMTP Server IP Address or Host Name	<input type="text"/>
Port No. (Usually Use 25)	<input type="text" value="25"/>
Reply E-mail Address	<input type="text"/>
Destination E-mail Address 1	<input type="text"/>
Destination E-mail Address 2	<input type="text"/>
Destination E-mail Address 3	<input type="text"/>
Subject (Up to 44 Characters)	<input type="text"/>
Text (Up to 63 Characters)	<input type="text"/>
How to authenticate	
<input checked="" type="radio"/> No authentication	
<input type="radio"/> POP before SMTP authentication	
POP3 Server IP Address or Host Name	<input type="text"/>
Port No. (Usually Use 110)	<input type="text" value="110"/>
Login ID (1 to 63 Characters)	<input type="text"/>
Password (0 to 63 Characters)	<input type="text"/>
<input type="radio"/> SMTP authentication	
Login ID (1 to 63 Characters)	<input type="text"/>
Password (0 to 63 Characters)	<input type="text"/>
<input type="button" value=" &lt; Back"/> <input type="button" value=" Save"/> <input type="button" value=" Cancel"/>	

### Note

When you set the transfer method to [E-mail], the system will automatically generate a unique ID for each transfer. This ID is used to track the transfer and is displayed in the transfer log. The ID is a 24-character string, consisting of a 16-character hexadecimal part and an 8-character decimal part. For example, the ID "20050101093020500" represents a transfer that occurred on January 1, 2005, at 9:30:20.500 AM. The ID is displayed in the transfer log in the following format: "20050101093020500".

Setting	Description
	<p>3 "192.168.0.253" (0 255)  "255.255.255.255"  (1 255).  6</p>
	<p>(1 65535). 25.</p>
	<p>( 3).</p>
	<p>190)  (0 44  0 22  2-</p>
	<p>190)  (0 63  0 31  2-</p>



Setting	Description
	<p>POP server authentication may be required by your ISP. In that case, set POP before SMTP authentication.</p> <p>4. (0 255) 3 "192.168.0.253".  "0.0.0.0"  "255.255.255.255" (0  255). 6  (1 65535).  110.  *2:  63 3 (1  63 3 (0  63 3 (0  (1 63 (1  (0 63 (0</p>

\*1 " ", &, <, >  
\*2 " "



## 4.3 Buffering or Transferring Images by Alarm Signal

### Note

- 1.
- 2.

No.

Trigger												
No	Status	Trigger	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Active Time of Trigger	Transfer Method	Notify
1	OFF	Timer	X	X	X	X	X	X	X	Always	No Transfer, No Memory Overwrite	-
2	OFF	Timer	X	X	X	X	X	X	X	Always	No Transfer, No Memory Overwrite	-
3	OFF	Timer	X	X	X	X	X	X	X	Always	No Transfer, No Memory Overwrite	-
4	OFF	Timer	X	X	X	X	X	X	X	Always	No Transfer, No Memory Overwrite	-
5	OFF	Timer	X	X	X	X	X	X	X	Always	No Transfer, No Memory Overwrite	-

- 3.

Trigger Setting

☒ Enable Image Buffer/Transfer

Trigger

Alarm1

Alarm enable condition

Rising: GND to Open (High)

Delete Buffered Images

Next >

Save

Cancel

### Note



5. Select the lens position when triggered.

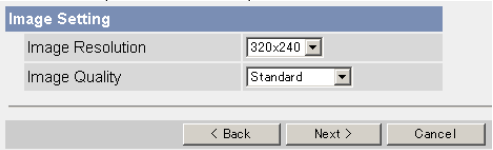


**Note**

- When the lens is triggered, the lens position is set to the position specified in the 'Do not move' option.

Setting	Description
Lens Position When Triggered	When the lens is triggered, the lens position is set to the position specified in the 'Do not move' option.

6. Select the image resolution and quality.



Setting	Description
Image Resolution	When the image is captured, the image resolution is set to the resolution specified in the '320x240' option.

Setting	Description
<p> </p>	<p> </p> <p><b>Note</b></p> <p>640 480</p>

7.

**Image Buffer Frequency**

☐ Enable Pre-trigger Image Buffer

Every 1 s, buffer 1 images. Total 1

☒ Enable Post-trigger Image Buffer

Every 1 s, buffer 1 images. Total 1

< Back Next > Cancel

**Note**

Setting	Description
<p> </p>	<p> </p> <p>(191)</p>

Setting	Description
Transfer Method	<p>Transfer Method</p> <p>191)</p>

8.

Transfer Method

☒ No Transfer, No Memory Overwrite
 ☐ No Transfer, Memory Overwrite
 ☐ FTP
 ☐ E-mail

< Back

Next >

Cancel

**Note**

Setting	Description
Transfer Method	<p>Transfer Method</p> <p>112).</p>
Transfer Method	<p>Transfer Method</p> <p>114).</p>

## When you set [FTP] for Transfer Method

FTP	
Server IP Address or Host Name	<input type="text"/>
Port No. (Usually Use 21)	<input type="text" value="21"/>
Login ID (0 to 63 Characters)	<input type="text"/>
Password (0 to 63 Characters)	<input type="password"/>
Login Timing	<input type="text" value="Every Time"/>
Upload File Name (1 to 234 Characters)	<input type="text"/>
Overwrite setting	<input type="text" value="Overwrite File"/>
Data Transfer Method	<input type="text" value="Passive Mode"/>

< Back      Next >      Cancel

Setting	Description
1	Server IP Address or Host Name (0 to 255) "192.168.0.253" (1 to 255) "255.255.255.255" (1 to 255)
2	Port No. (1 to 65535) 21
3	Login ID (0 to 63) (0 to 63)
4	Password (0 to 63) (0 to 63)
5	Login Timing Every Time
6	Upload File Name (1 to 234) (1 to 234)
7	Overwrite setting Overwrite File
8	Data Transfer Method Passive Mode



Setting	Description
	<p>20050101093020500.</p> <p>9 30 20 500</p> <p>1, 2005.</p>

\*1 " , & , < >

\*2 " ,

## When you set [E-mail] for Transfer Method

E-mail Transfer	
SMTP Server IP Address or Host Name	<input type="text"/>
Port No. (Usually Use 25)	<input type="text" value="25"/>
Reply E-mail Address	<input type="text"/>
Destination E-mail Address 1	<input type="text"/>
Destination E-mail Address 2	<input type="text"/>
Destination E-mail Address 3	<input type="text"/>
Subject (Up to 44 Characters)	<input type="text"/>
Text (Up to 63 Characters)	<input type="text"/>
How to authenticate	
<input checked="" type="radio"/> No authentication	
<input type="radio"/> POP before SMTP authentication	
POP3 Server IP Address or Host Name	<input type="text"/>
Port No. (Usually Use 110)	<input type="text" value="110"/>
Login ID (1 to 63 Characters)	<input type="text"/>
Password (0 to 63 Characters)	<input type="text"/>
<input type="radio"/> SMTP authentication	
Login ID (1 to 63 Characters)	<input type="text"/>
Password (0 to 63 Characters)	<input type="text"/>
<input type="button" value=" &lt; Back"/> <input type="button" value=" Next &gt; "/> <input type="button" value=" Cancel "/>	

### Note

20050101093020500

Setting	Description
(0 255)	"192.168.0.255". "255.255.255.255" (1 255).
(1 65535).	25.
*2	
( 3).	
*2	
(0 44 190)	1- 0' 22' 2-
(0 63' 190)	1- 0' 31' 2-

Setting	Description
	POP server authentication may be required by your ISP. In that case, set POP before SMTP authentication.

$$\begin{array}{c} \text{N} \\ *1 \text{N} \\ *2 \end{array}$$



1. The environmental movement is a social movement that seeks to protect the natural world and improve the quality of the environment. It is a broad-based movement that includes a wide range of organizations and individuals who are concerned about the environment. The environmental movement has a long history, dating back to the early 20th century when conservationists first began to organize and advocate for the protection of natural resources. Over the years, the movement has grown and evolved, with a focus on a wide range of issues, including air and water pollution, climate change, and the protection of endangered species. The environmental movement is a powerful force for change, and it has played a major role in shaping public policy and raising awareness of environmental issues.
2. The environmental movement is a social movement that seeks to protect the natural world and improve the quality of the environment. It is a broad-based movement that includes a wide range of organizations and individuals who are concerned about the environment. The environmental movement has a long history, dating back to the early 20th century when conservationists first began to organize and advocate for the protection of natural resources. Over the years, the movement has grown and evolved, with a focus on a wide range of issues, including air and water pollution, climate change, and the protection of endangered species. The environmental movement is a powerful force for change, and it has played a major role in shaping public policy and raising awareness of environmental issues.
3. The environmental movement is a social movement that seeks to protect the natural world and improve the quality of the environment. It is a broad-based movement that includes a wide range of organizations and individuals who are concerned about the environment. The environmental movement has a long history, dating back to the early 20th century when conservationists first began to organize and advocate for the protection of natural resources. Over the years, the movement has grown and evolved, with a focus on a wide range of issues, including air and water pollution, climate change, and the protection of endangered species. The environmental movement is a powerful force for change, and it has played a major role in shaping public policy and raising awareness of environmental issues.
4. The environmental movement is a social movement that seeks to protect the natural world and improve the quality of the environment. It is a broad-based movement that includes a wide range of organizations and individuals who are concerned about the environment. The environmental movement has a long history, dating back to the early 20th century when conservationists first began to organize and advocate for the protection of natural resources. Over the years, the movement has grown and evolved, with a focus on a wide range of issues, including air and water pollution, climate change, and the protection of endangered species. The environmental movement is a powerful force for change, and it has played a major role in shaping public policy and raising awareness of environmental issues.
5. The environmental movement is a social movement that seeks to protect the natural world and improve the quality of the environment. It is a broad-based movement that includes a wide range of organizations and individuals who are concerned about the environment. The environmental movement has a long history, dating back to the early 20th century when conservationists first began to organize and advocate for the protection of natural resources. Over the years, the movement has grown and evolved, with a focus on a wide range of issues, including air and water pollution, climate change, and the protection of endangered species. The environmental movement is a powerful force for change, and it has played a major role in shaping public policy and raising awareness of environmental issues.

## 4.4 Buffering or Transferring Images by Motion Detection Signal

When the motion detection signal is input, the camera buffers or transfers the image. The camera buffers or transfers the image when the motion detection signal is input. The camera buffers or transfers the image when the motion detection signal is input.

### Note

- 1. When the motion detection signal is input, the camera buffers or transfers the image. The camera buffers or transfers the image when the motion detection signal is input.
- 2. When the motion detection signal is input, the camera buffers or transfers the image. The camera buffers or transfers the image when the motion detection signal is input.

1.

2.

Trigger												
No.	Status	Trigger	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Active Time of Trigger	Transfer Method	Notify
1	OFF	Timer	X	X	X	X	X	X	X	Always	No Transfer, No Memory Overwrite	-
2	OFF	Timer	X	X	X	X	X	X	X	Always	No Transfer, No Memory Overwrite	-
3	OFF	Timer	X	X	X	X	X	X	X	Always	No Transfer, No Memory Overwrite	-
4	OFF	Timer	X	X	X	X	X	X	X	Always	No Transfer, No Memory Overwrite	-
5	OFF	Timer	X	X	X	X	X	X	X	Always	No Transfer, No Memory Overwrite	-

3.

### Trigger Setting

☒ Enable Image Buffer/Transfer

Trigger 

Motion Detection

Delete Buffered Images

Next >

Save

Cancel

## Note

4.

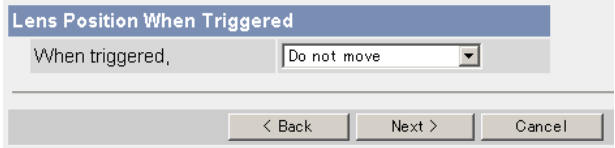
Time							Active Time of Trigger	
Sun	Mon	Tue	Wed	Thu	Fri	Sat	Always	AM
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	12
							h	0
							min to	PM
							11	h
							59	min
<div> <div>&lt; Back</div> <div>Next &gt;</div> <div>Cancel</div> </div>								

## Note

Setting	Description



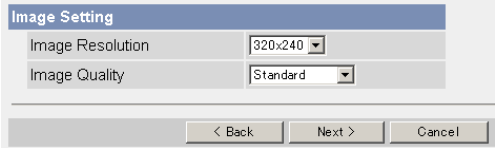
5. Select the **Lens Position When Triggered** option.



**Note**

Setting	Description
Lens Position When Triggered	When triggered, the lens position is set to the position of the lens when the camera is triggered. (30) 1, 20 (31) 1, 20

6. Select the **Image Setting** option.



Setting	Description
Image Setting	Image Resolution (320x240) 160 120 (640 480, 320 240) Image Quality (Standard) 1, 20

Setting	Description
<p>640 480</p>	<p>Note</p>

7.

**Image Buffer Frequency**

☐ Enable Pre-trigger Image Buffer

Every 1 s , buffer 1 images. Total 1 images.

☒ Enable Post-trigger Image Buffer

Every 1 s , buffer 1 images. Total 1 images.

< Back    Next >    Cancel

**Note**

Setting	Description
<p>191)</p>	



## When you set [FTP] for Transfer Method

FTP	
Server IP Address or Host Name	<input type="text"/>
Port No. (Usually Use 21)	<input type="text" value="21"/>
Login ID (0 to 63 Characters)	<input type="text"/>
Password (0 to 63 Characters)	<input type="password"/>
Login Timing	<input type="button" value="Every Time"/>
Upload File Name (1 to 234 Characters)	<input type="text"/>
Overwrite setting	<input type="button" value="Overwrite File"/>
Data Transfer Method	<input type="button" value="Passive Mode"/>

Setting	Description
Server IP Address or Host Name	(0 255) 3 "192.168.0.253". "255.255.255.255" (1 255)
Port No. (Usually Use 21)	(1 65535). 21.
Login ID (0 to 63 Characters)	(0 63).
Password (0 to 63 Characters)	(0 63).
Login Timing	1
Upload File Name (1 to 234 Characters)	234

Setting	Description
	<p>20050101093020500.</p> <p>"9 30 20 500</p> <p>1, 2005".</p>

\*1 " , , & , < > .

\*2 " .

$\frac{1}{2} \left( \frac{1}{2} \right) = \frac{1}{4}$

[illegible][illegible]

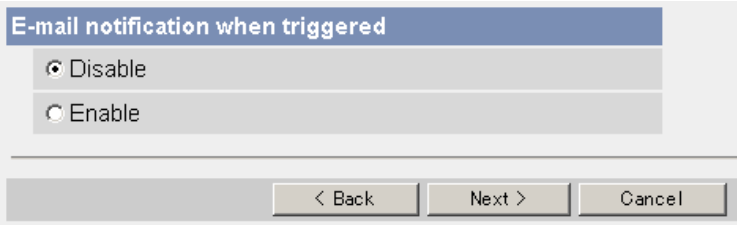
Setting	Description
3	"192.168.0.255" (0 255) "255.255.255.255" (1 255) 6
	(1 65535). 25.
*2	
*2	( 3).
1 3	
*2	( 190) 0 22 (0 44 2-
*2	( 190) 0 31 (0 63 2-

Setting	Description
	POP server authentication may be required by your ISP. In that case, set POP before SMTP authentication.




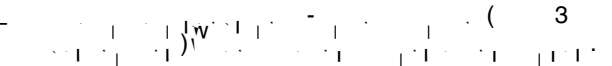
4

\*1N  
\*2(



9. 

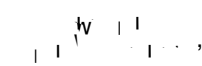
127, 128.

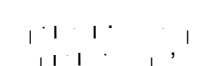
Setting	Description
	
	

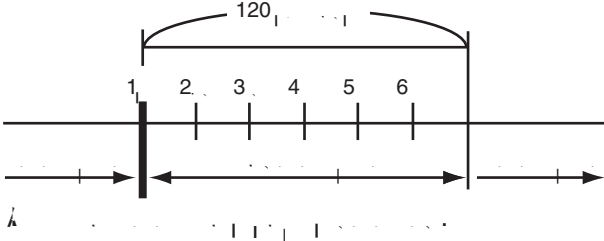
10. 

11. 

**Note**

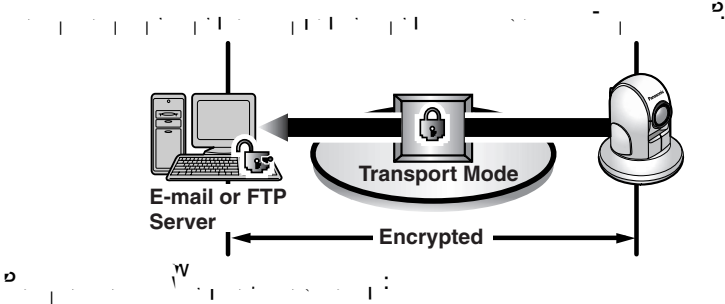






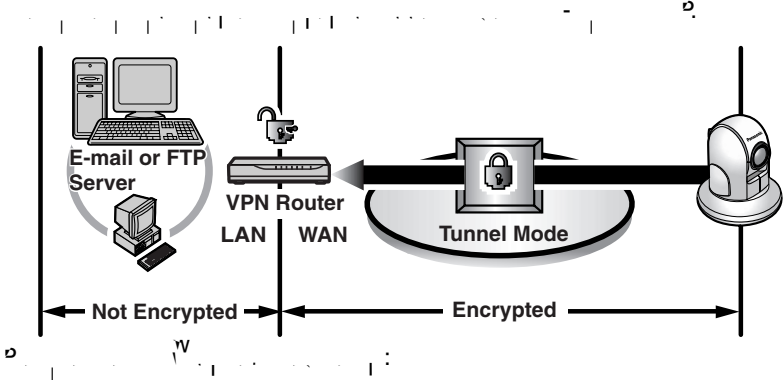
1. The environmental movement is a social movement that seeks to protect the natural world and improve the quality of the environment. It is a broad-based movement that includes a wide range of organizations and individuals who are concerned about the environment. The environmental movement has a long history, dating back to the early 20th century when conservationists first began to organize and advocate for the protection of natural resources. Over the years, the movement has grown in scope and influence, and it now encompasses a wide range of issues, including air and water pollution, climate change, and the protection of endangered species. The environmental movement is a complex and multifaceted movement, and it is constantly evolving as new issues and challenges arise. It is a movement that is dedicated to the protection of the natural world and the improvement of the quality of the environment for all people.
2. The environmental movement is a social movement that seeks to protect the natural world and improve the quality of the environment. It is a broad-based movement that includes a wide range of organizations and individuals who are concerned about the environment. The environmental movement has a long history, dating back to the early 20th century when conservationists first began to organize and advocate for the protection of natural resources. Over the years, the movement has grown in scope and influence, and it now encompasses a wide range of issues, including air and water pollution, climate change, and the protection of endangered species. The environmental movement is a complex and multifaceted movement, and it is constantly evolving as new issues and challenges arise. It is a movement that is dedicated to the protection of the natural world and the improvement of the quality of the environment for all people.
3. The environmental movement is a social movement that seeks to protect the natural world and improve the quality of the environment. It is a broad-based movement that includes a wide range of organizations and individuals who are concerned about the environment. The environmental movement has a long history, dating back to the early 20th century when conservationists first began to organize and advocate for the protection of natural resources. Over the years, the movement has grown in scope and influence, and it now encompasses a wide range of issues, including air and water pollution, climate change, and the protection of endangered species. The environmental movement is a complex and multifaceted movement, and it is constantly evolving as new issues and challenges arise. It is a movement that is dedicated to the protection of the natural world and the improvement of the quality of the environment for all people.
4. The environmental movement is a social movement that seeks to protect the natural world and improve the quality of the environment. It is a broad-based movement that includes a wide range of organizations and individuals who are concerned about the environment. The environmental movement has a long history, dating back to the early 20th century when conservationists first began to organize and advocate for the protection of natural resources. Over the years, the movement has grown in scope and influence, and it now encompasses a wide range of issues, including air and water pollution, climate change, and the protection of endangered species. The environmental movement is a complex and multifaceted movement, and it is constantly evolving as new issues and challenges arise. It is a movement that is dedicated to the protection of the natural world and the improvement of the quality of the environment for all people.
5. The environmental movement is a social movement that seeks to protect the natural world and improve the quality of the environment. It is a broad-based movement that includes a wide range of organizations and individuals who are concerned about the environment. The environmental movement has a long history, dating back to the early 20th century when conservationists first began to organize and advocate for the protection of natural resources. Over the years, the movement has grown in scope and influence, and it now encompasses a wide range of issues, including air and water pollution, climate change, and the protection of endangered species. The environmental movement is a complex and multifaceted movement, and it is constantly evolving as new issues and challenges arise. It is a movement that is dedicated to the protection of the natural world and the improvement of the quality of the environment for all people.

# 4.5 Transferring Camera Images in Transport Mode



Item	Supported Feature

# 4.6 Transferring Camera Images in Tunnel Mode




Item	Supported Feature

## 4.7 Setting the Motion Detection

1. Press the **Menu** key to display the menu.
2. Press the **Left** key to display the **Alarm** menu.

Threshold


Low High



3. Press the **Right** key to display the **Sensitivity** menu.

Sensitivity

Low sensitivity High sensitivity



4. Press the **Enter** key to save the settings.
5. Press the **Exit** key to return to the main menu.

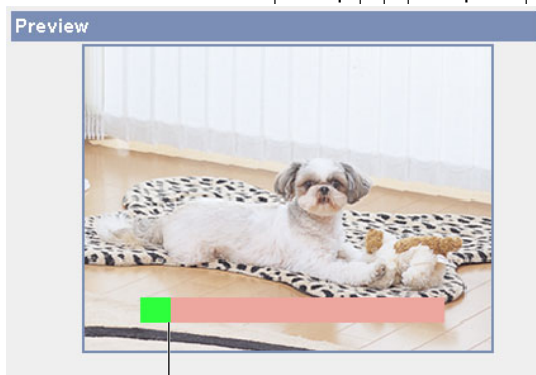
Setting	Description
Threshold	Adjusts the sensitivity of the motion detector. The higher the threshold, the more sensitive the detector is to motion.
Sensitivity	Adjusts the sensitivity of the motion detector. The higher the sensitivity, the more sensitive the detector is to motion.

### Note

- The motion detector is only active when the alarm is armed.

## Preview

- The `Preview` class is a subclass of `Image` and is used to display a preview of an image.
- The `Preview` class has a `Preview` constructor that takes an `Image` object as an argument.
- The `Preview` class has a `Preview` method that takes an `Image` object as an argument and returns a `Preview` object.

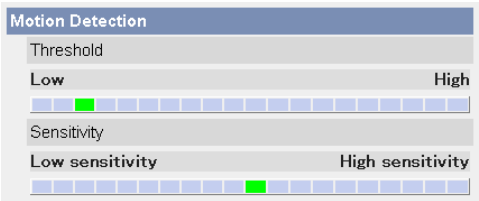


## Note

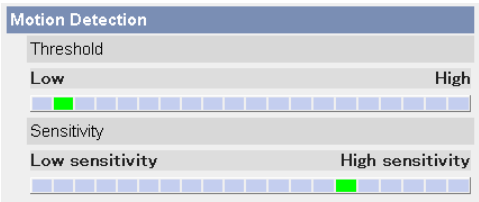
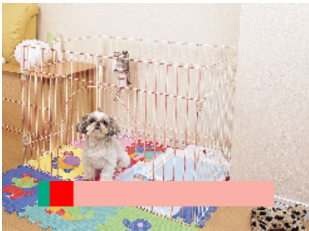
- The `Preview` class is a subclass of `Image` and is used to display a preview of an image.
- The `Preview` class has a `Preview` constructor that takes an `Image` object as an argument.
- The `Preview` class has a `Preview` method that takes an `Image` object as an argument and returns a `Preview` object.

What is “threshold”?

What is “sensitivity”?



Note



Note







**Note**

Setting	Description
	3 "192.168.0.253" (0 255) "255.255.255.255" (1 255).
	6 (1 65535). 25.
	( 3).
	1 3 *2 0 22 (0 44 190) 2-

Setting	Description
	<p>POP server authentication may be required by your ISP. In that case, set POP before SMTP authentication.</p> <p>4. (0 255) 3 "192.168.0.253".  "0.0.0.0"  "255.255.255.255" (0  255). 6  (1 65535).  110.  *2:  63 3 (1  63 3 (0  63 3 (0  (1 63 )  (0 63 )</p>

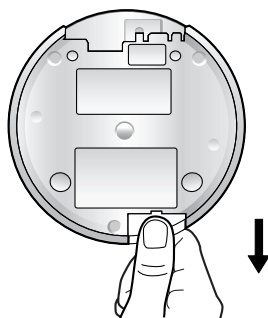
\*1 " , , & , < > "

\*2 " "

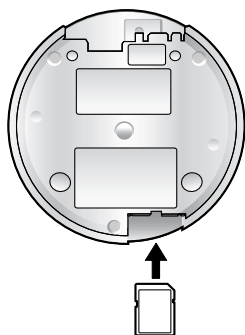
## 4.9 Using the SD Memory Card

**Note**

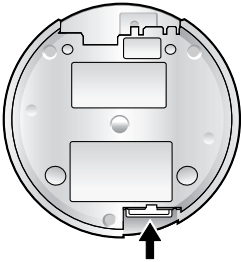
- 1.



- 2.**



3. Push the battery cover into the battery compartment until it is fully seated.



**Note**

- Do not use the device if the battery cover is not properly seated.
- Do not use the device if the battery cover is damaged or if the battery cover is not the original cover.
- Do not use the device if the battery cover is not the original cover.
- Do not use the device if the battery cover is not the original cover.

4. Turn the device on.

### 4.9.1 Format the SD Memory Card

**Note**

- 1. Press the **Menu** button.
- 2. Press the **SD** button.
- 3. Press the **Format** button.

Trigger

No.	Status	Trigger	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Active Time of Trigger	Transfer Method	Notify
1	OFF	Timer	X	X	X	X	X	X	X	Always	No Transfer, No Memory Overwrite	-
2	OFF	Timer	X	X	X	X	X	X	X	Always	No Transfer, No Memory Overwrite	-
3	OFF	Timer	X	X	X	X	X	X	X	Always	No Transfer, No Memory Overwrite	-
4	OFF	Timer	X	X	X	X	X	X	X	Always	No Transfer, No Memory Overwrite	-
5	OFF	Timer	X	X	X	X	X	X	X	Always	No Transfer, No Memory Overwrite	-

SD memory card

To format the SD memory card or stop SD recording, click the desired button below.  
To stop SD recording, click the SD video recording stop button.

Format

SD video recording stop

- 4. Press the **Left** button.
- 5. Press the **SD** button.

## 4.9.2 Start the SD Memory Recording

### Note

1.

2.

Trigger												
No	Status	Trigger	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Active Time of Trigger	Transfer Method	Notify
1	OFF	Timer	X	X	X	X	X	X	X	Always	No Transfer, No Memory Overwrite	-
2	OFF	Timer	X	X	X	X	X	X	X	Always	No Transfer, No Memory Overwrite	-
3	OFF	Timer	X	X	X	X	X	X	X	Always	No Transfer, No Memory Overwrite	-
4	OFF	Timer	X	X	X	X	X	X	X	Always	No Transfer, No Memory Overwrite	-
5	OFF	Timer	X	X	X	X	X	X	X	Always	No Transfer, No Memory Overwrite	-

**SD memory card**  
To format the SD memory card or start SD recording, click the desired button below.  
To start SD recording, click the SD video recording start button.  

FormatSD video recording start

3.

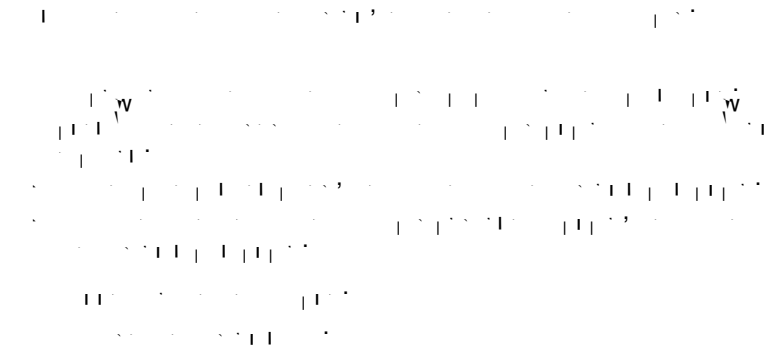
4.

### Note

### 4.9.3 Stop the SD Memory Recording

**Note**

- 1.
- 2.



- 3.

- 4.

**Note**

Trigger												
No.	Status	Trigger	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Active Time of Trigger	Transfer Method	Notify
1	OFF	Timer	X	X	X	X	X	X	X	Always	No Transfer, No Memory Overwrite	-
2	OFF	Timer	X	X	X	X	X	X	X	Always	No Transfer, No Memory Overwrite	-
3	OFF	Timer	X	X	X	X	X	X	X	Always	No Transfer, No Memory Overwrite	-
4	OFF	Timer	X	X	X	X	X	X	X	Always	No Transfer, No Memory Overwrite	-
5	OFF	Timer	X	X	X	X	X	X	X	Always	No Transfer, No Memory Overwrite	-

**SD memory card**

To format the SD memory card or stop SD recording, click the desired button below.  
To stop SD recording, click the SD video recording stop button.



## 5 Using Other Features

### 5.1 Changing Initial Settings on the Single Camera page or the Multi-Camera page

1. Click the **Settings** icon in the top right corner of the page.
2. Click the **Settings** icon in the top right corner of the page.

Single Camera	
Image Resolution	320x240
Image Quality	Standard
Refresh Interval	Motion
Multi-Camera	
Image Resolution	320x240
Image Quality	Standard
Refresh Interval	Motion
Time stamp setting	
Time stamp	Disable
Language	
Language	English
Banner Display	
<input type="checkbox"/> Enable	
Banner user	All users
Image URL (1 to 127 Characters)	
Link URL (0 to 127 Characters)	
<div>Save Cancel</div>	

Setting	Description
	<p>640 480 ( )</p> <p>320 240 ( )</p> <p>160 120 ( )</p>
	<p>z</p> <p>z</p>
	<p>3, 5, 10, 30, 60</p>
	<p><b>Note</b></p> <p>—</p> <p>— 24</p>
	<p>←</p>
	<p><b>Note</b></p> <p>—</p> <p>—</p>

Setting	Description
	<p>1. The first 128 bits of the input are used to initialize the state of the algorithm.</p> <p>2. The remaining bits of the input are processed in blocks of 128 bits each. Each block is XORed with the output of the previous block to produce the next block of the output.</p> <p>3. The output of the algorithm is the concatenation of all the blocks of the output.</p>
*1	<p>1. The first 128 bits of the input are used to initialize the state of the algorithm.</p> <p>2. The remaining bits of the input are processed in blocks of 128 bits each. Each block is XORed with the output of the previous block to produce the next block of the output.</p> <p>3. The output of the algorithm is the concatenation of all the blocks of the output.</p>
*1	<p>1. The first 128 bits of the input are used to initialize the state of the algorithm.</p> <p>2. The remaining bits of the input are processed in blocks of 128 bits each. Each block is XORed with the output of the previous block to produce the next block of the output.</p> <p>3. The output of the algorithm is the concatenation of all the blocks of the output.</p>

\*1. The first 128 bits of the input are used to initialize the state of the algorithm.

3.

- The first 128 bits of the input are used to initialize the state of the algorithm.
- The remaining bits of the input are processed in blocks of 128 bits each. Each block is XORed with the output of the previous block to produce the next block of the output.
- The output of the algorithm is the concatenation of all the blocks of the output.

4.

- The first 128 bits of the input are used to initialize the state of the algorithm.
- The remaining bits of the input are processed in blocks of 128 bits each. Each block is XORed with the output of the previous block to produce the next block of the output.
- The output of the algorithm is the concatenation of all the blocks of the output.

## 5.2 Configuring Multiple Cameras

1. Click **Cameras** in the left-hand menu.
2. Click **Add**.

No.	Display	IP Address or Host Name	Port No.	Camera Name
1	On	selfcamera	--	*****
<a href="#">Add</a>				

**Note**

- The camera name is limited to 15 characters.
- The camera name cannot contain spaces or special characters.

**Change Camera Order**

From No. 1 To No. 1 **Move**

3. Click **Add Camera**.

**Add Camera**

Display

☒ On

IP Address or Host Name

Port No.  
(1 to 65535)

Camera Name  
(1 to 15 characters)

[Clicking this link, enters this camera's settings.](#)

Save

Cancel

- The camera name is limited to 15 characters.
- The camera name cannot contain spaces or special characters.

## Setting

## Description

*1	<p>             4. (0 255) 3 "192.168.0.253".              "0.0.0.0" "255.255.255.255"              6, ( 190). ", , #,              2           </p>	
----	--	--

## Note

- 4.

# 5.3 Specifying Operation Time

**Note**

- 1. Select the operation to specify the operation time.
- 2. No.

Operation Time										
No.	Status	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Operation Time	
1	Disable	X	X	X	X	X	X	X	Always	
2	Disable	X	X	X	X	X	X	X	Always	
3	Disable	X	X	X	X	X	X	X	Always	
4	Disable	X	X	X	X	X	X	X	Always	
5	Disable	X	X	X	X	X	X	X	Always	
6	Disable	X	X	X	X	X	X	X	Always	
7	Disable	X	X	X	X	X	X	X	Always	

**Note**

- 3. Select the operation to specify the operation time.

Operation Time												
Enable	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Operation Time				
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="radio"/> Always	C AM 12 h 0 min to AM 12 h 0 min			
Save Cancel												







# 5.5 Changing the Indicator Display

1. Click the **Indicator Control** tab.
2. Select the indicator display option you want to use.

**Indicator Control**

☒ Turn indicator on when camera is on.

☐ Turn indicator on during camera access.

☐ Never turn indicator on.

Save

Cancel

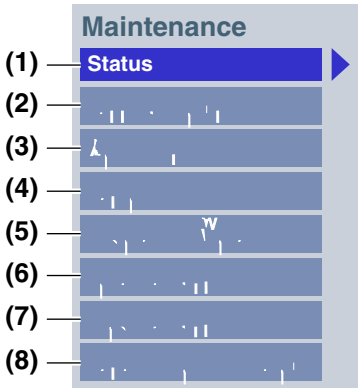
3. Click the **Indicator Control** tab.
4. Select the indicator display option you want to use.

**Note**

3. Click the **Indicator Control** tab.
4. Select the indicator display option you want to use.

# 6 Camera Maintenance

## 6.1 Maintenance page



---

### Maintenance

- (1) **Status** 155).
  - (2) **Session Status** 155).
  - (3) **Alarm Log** 156).
  - (4) **Restart** 157).
  - (5) **Update Firmware** 158).
  - (6) **Save Settings** 160).
  - (7) **Load Settings** 161).
  - (8) **Reset to Factory Default** 162).
-

## 6.1.1 Confirming the Status

Version	
Displays Hardware/Firmware Version.	
Model	*****
Firmware(Boot)	***
Firmware(Application)	***

### Note

— [panasonic.co.jp/pcc/products/en/netwcam/](http://panasonic.co.jp/pcc/products/en/netwcam/) http://

## 6.1.2 Confirming Session Status

Number of Sessions		
Show number of motion and audio sessions.		
Div	Max Sessions	Now Sessions
Motion	30	1
Audio	10	1
List of Sessions		
Display max: 40 tables connecting now.		
Table Port		User

6.1.3 Confirming Alarm Logs

1. Click on the "New Alarm Logs" button.
2. Click on the "Confirm" button.

		New Alarm Logs
		3
Date	Sensor Type	Signal Type
2005/ 5/19 13:24:32	Motion Detection	-----
2005/ 5/19 13:22:53	Alarm2	Fall
2005/ 5/19 13:21:36	Alarm1	Rise

Note

The alarm logs are displayed in the following table.

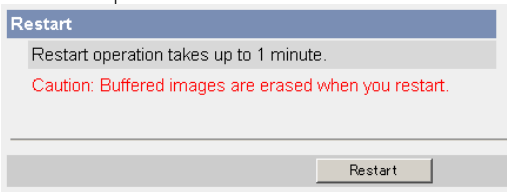
Item	Description
1	Alarm1
2	Alarm2
3	Alarm3
4	Alarm4
5	Alarm5
6	Alarm6
7	Alarm7
8	Alarm8
9	Alarm9
10	Alarm10
11	Alarm11
12	Alarm12
13	Alarm13
14	Alarm14
15	Alarm15
16	Alarm16
17	Alarm17
18	Alarm18
19	Alarm19
20	Alarm20
21	Alarm21
22	Alarm22
23	Alarm23
24	Alarm24
25	Alarm25
26	Alarm26
27	Alarm27
28	Alarm28
29	Alarm29
30	Alarm30
31	Alarm31
32	Alarm32
33	Alarm33
34	Alarm34
35	Alarm35
36	Alarm36
37	Alarm37
38	Alarm38
39	Alarm39
40	Alarm40
41	Alarm41
42	Alarm42
43	Alarm43
44	Alarm44
45	Alarm45
46	Alarm46
47	Alarm47
48	Alarm48
49	Alarm49
50	Alarm50
51	Alarm51
52	Alarm52
53	Alarm53
54	Alarm54
55	Alarm55
56	Alarm56
57	Alarm57
58	Alarm58
59	Alarm59
60	Alarm60
61	Alarm61
62	Alarm62
63	Alarm63
64	Alarm64
65	Alarm65
66	Alarm66
67	Alarm67
68	Alarm68
69	Alarm69
70	Alarm70
71	Alarm71
72	Alarm72
73	Alarm73
74	Alarm74
75	Alarm75
76	Alarm76
77	Alarm77
78	Alarm78
79	Alarm79
80	Alarm80
81	Alarm81
82	Alarm82
83	Alarm83
84	Alarm84
85	Alarm85
86	Alarm86
87	Alarm87
88	Alarm88
89	Alarm89
90	Alarm90
91	Alarm91
92	Alarm92
93	Alarm93
94	Alarm94
95	Alarm95
96	Alarm96
97	Alarm97
98	Alarm98
99	Alarm99
100	Alarm100

# 6.1.4 Restarting the Camera

**Note**

- When you restart the camera, the camera will stop recording and the buffered images will be erased.
- The camera will restart recording after the restart operation is completed.

1. Click the **Restart** button in the **Restart** dialog box.
2. The camera will restart recording.



1. Click the **Restart** button in the **Restart** dialog box.

## 6.1.5 Updating the Camera Firmware

### Note

1.

<http://panasonic.co.jp/pcc/products/en/netwkcsm/>

2.

3.

#### Update Firmware

You can update to the latest version of the camera internal operating system. Click on "Update Firmware" below. Depending on the speed of your system, the procedure can take up to 4 minutes.

Caution: (1) Buffered images are erased when you execute this function.  
(2) Never turn off the power during the firmware update process.

Update Firmware

#### Restarting now...

Restart operation takes up to 1 minute.

Please enter the proper IP address to URL when no response.

#### Please enter or browse the firmware file name for update.

File Name

Browse...

The firmware update process takes about 180 seconds via "File Upload", "Flash-ROM Writing", and "Restart", automatically. To cancel the firmware update, please push "Cancel".

Caution: Never turn off the power, during the firmware update process.

Update Firmware

Cancel

4.

5.

6.

### Updating firmware.

Please wait about 160 seconds.

**Caution:** Never turn off the power, during the firmware update process.

### Restarting now...

Restart operation takes up to 1 minute.

Please enter the proper IP address to URL when no response.

7.



### 6.1.6 Creating the Configuration File

1. In the **Save Settings** dialog box, click **Save**.

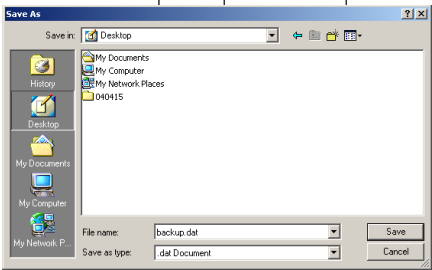
**Note**

1. In the **Save Settings** dialog box, click **Save**.

1. In the **Save Settings** dialog box, click **Save**.
2. In the **Save Settings** dialog box, click **Save**.



3. In the **Save Settings** dialog box, click **Save**.
4. In the **Save Settings** dialog box, click **Save**.



1. In the **Save Settings** dialog box, click **Save**.

1. In the **Save Settings** dialog box, click **Save**.

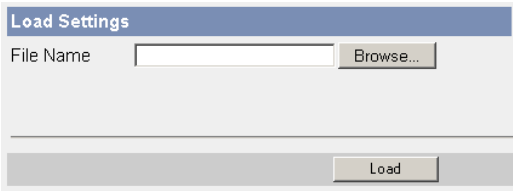
1. In the **Save Settings** dialog box, click **Save**.



# 6.1.7 Loading Settings from a Configuration File

## Note

- -
- 1.
  - 2.



- 3.
- 
- 4.
  - 5.
-

**1.**  $\frac{1}{x^2} = x^{-2}$

**2.**  $\frac{d}{dx} x^{-2} = -2x^{-3} = -\frac{2}{x^3}$

The Reset to Factory Default operation takes about 1 minute.  
This feature will be executed and all camera settings reset to factory default directly after the Execute button is clicked.

Execute

—  $\nu$

— 167 — 24- — 77.

— 177

—  $\nu$

( 166).

—  $\nu$

— 1

—  $\nu$

## 6.2 Support page



### Support

- (1) Help
- (2) Product Information
- (3) Support Information

### 6.2.1 The Help page



#### [Index]

- [1. Top](#)
- [2. Single Camera](#)
- [3. Multi-Camera](#)
- [4. Buffered Image](#)
- [5. Support](#)
- [6. Login](#)

### 6.2.2 Product Information



#### Note

### 6.2.3 Support Information



#### Note



### 6.3 External I/O

The external I/O of the 8086 is explained in the following table.

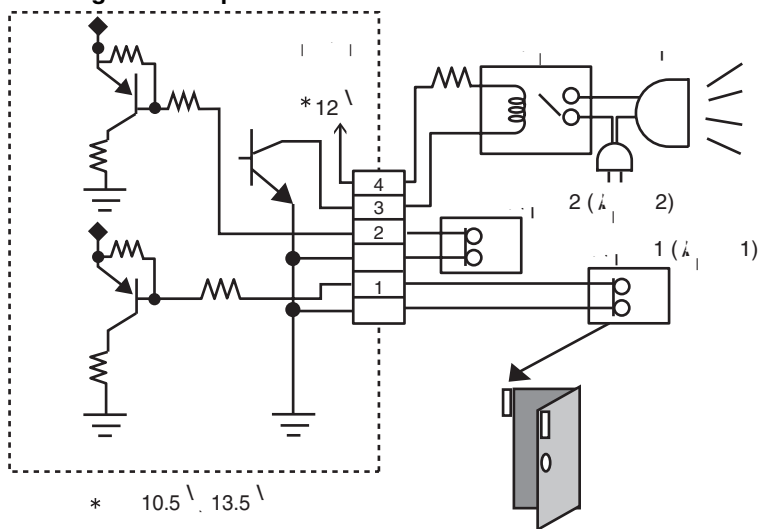
Explanation of the External I/O

Pin	Features
1	Address bus (A <sub>15</sub> )
2	Address bus (A <sub>15</sub> )
3	Address bus (A <sub>15</sub> )
4	Address bus (A <sub>15</sub> )

**Note**

- The external I/O of the 8086 is explained in the following table.

### Circuit Diagram Example

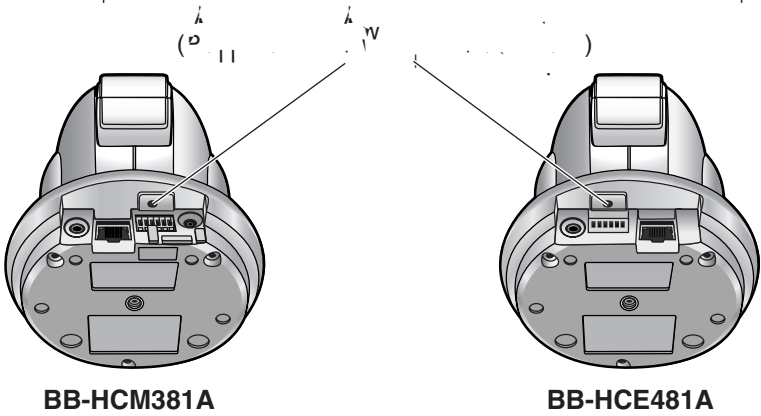


### CAUTION

- The external I/O is not capable of connecting directly to devices that require large amounts of current. In some cases, a custom interface circuit (customer-provided) may have to be used. Serious damage to the camera may result if a device that exceeds its electrical capability is connected to the external I/O (see page 164).
- Low voltage/current circuits and high voltage/current circuits are used in the camera circuit. All wiring should be performed by a qualified electrician. Incorrect wiring could damage the camera and cause a fatal electric shock.

# 7 Other Information

## 7.1 FACTORY DEFAULT RESET Button



### Note

- The reset button is used to restore the router to its factory default configuration. Pressing the button will erase all user-defined configurations and restore the router to its original state.
- The reset button is located on the rear panel of the router, near the Ethernet ports.
- The reset button is a small, rectangular button.
- The reset button is used to restore the router to its factory default configuration.
- The reset button is located on the rear panel of the router, near the Ethernet ports.
- The reset button is a small, rectangular button.

# 7.2 Default Setting List

## Basic

Items	Default	Required	Note
( 4 )		-	
( )		-	-
( )		-	-
( )	80	-	20, 21, 25 110 *2
( )	192.168.0. 253		*1
( )	255.255. 255.0		*1
( )			0 63 *4
( )			*1
( )			*1
( )		-	0.1, 0.2, 0.3, 0.5, 1
		-	100 100 10 10

	Items	Default	Required	Note
A	( 6 )		-	
			-	
		80	-	20, 21, 25 110*2
				*1
				*1
				*1
			-	0.1, 0.2, 0.3, 0.5, 1
			-	100 100 10 10
D			-	-
		( 3 )	-	
			-	-
			-	-
D			-	-
			-	-



Items		Default	Required	Note
			-	
				1 255 *8
		10		/10, 30( ), 1, 3, 6, 12, 24( )
				0 63
				0 63
		/	-	/ /24
				-
				1 255 *4
		-05:00	-	-
			-	-
		, 2	-	-
		2	-	-

Items		Default	Required	Note
	1. 15			*6
		-	-	
		60	-	50, 60
			-	
			-	
		-175	-	-175 +175
		0	-	-175 +175
		+175	-	-175 +175
		-120	-	-120 0
		-90	-	-120 0
		0	-	-120 0

Items		Default	Required	Note
1.1.1.1	( )	0	-	0 +90
	( )	+90	-	0 +90
	( )	+90	-	0 +90
	( )	+90	-	0 +90
	( )		-	10, 20, 30 ( ), 1, 5, 10, 30 ( ), 1
	( )		-	1, 2/
1.1.1.2	( )	480	-	480, 240
	( )		-	-
	( )	1	-	1, 2, 3, 5, 10, 20, 30, 60 ( )
	( )		-	-
	( )		-	-
	( )		-	-

Account

Items		Default	Required	Note
Accounting for the Year	Accounting for the Year	Accounting for the Year	-	-
	Accounting for the Year	Accounting for the Year	Accounting for the Year	6 15 *3
	Accounting for the Year	Accounting for the Year	Accounting for the Year	6 15 *3
	Accounting for the Year	Accounting for the Year	Accounting for the Year	6 15 *3
Accounting for the Year	Accounting for the Year	Accounting for the Year	-	-
	Accounting for the Year	Accounting for the Year	Accounting for the Year	6 15 *3
	Accounting for the Year	Accounting for the Year	Accounting for the Year	6 15 *3
	Accounting for the Year	Accounting for the Year	Accounting for the Year	6 15 *3
	Accounting for the Year	Accounting for the Year	Accounting for the Year	Accounting for the Year, 10, 30 ( ), 1, 5, 10, 30, 60 ( )
	Accounting for the Year	3	-	3, 5, 10, 30, 60 ( )
	Accounting for the Year	Accounting for the Year	-	-

Buffer/Transfer

	Items	Default	Required	Note
Buffer	Buffer		-	-
	Buffer		-	1/2/1
	Buffer		-	-
	(Buffer)	320 240	-	160 120, 320 240, 640 480
	Buffer		-	
	Buffer		-	30
	Buffer		-	-
	Buffer		1, 2	-
Transfer	Transfer		-	-
	Transfer		-	-

Items		Default	Required	Note
			1 2	/ ( ) w- ) / ( ) w-
				/ <sup>p</sup> , 1, 12 ( ), 0/10/20/30/ 40/50 ( )
		<sup>p</sup> 12 0		-
				-
	<sup>p</sup> . ( <sup>p</sup> )	25		*2
	<sup>p</sup> . ( <sup>p</sup> <sup>p</sup> )	110		*2
				-
				-

[illegible]

		320 240	-	320 240 640 480
			-	
			-	3, 5, 10, 30, 60 ( )
		320 240	-	160 120 320 240
			-	
				3, 5, 10, 30, 60 ( )
			-	
			-	
			-	
			-	

Items	Default	Required	Note
-	.1	-	-
			-
0 4			*1 *5 1 255
0	--		20, 21, 25 110 *2
	- 381 - 481		1 15 *7
	.1 .1	-	.1 .12
		-	-
		-	/
	/	-	-
		-	-

\*1 0 4, 4 (0 255) 3 "192.168.0.253".  
 "0.0.0.0" "255.255.255.255"  
 0 6, 8 "..."  
 ( . 2001:2:3:4::5)

\*2 1 65535.

\*3 ( 190).

\*4 ( 190).

\*5 ( 190).

\*6 ( 190) (1 15  
 1- 1 7 2- )  
 &, <, >

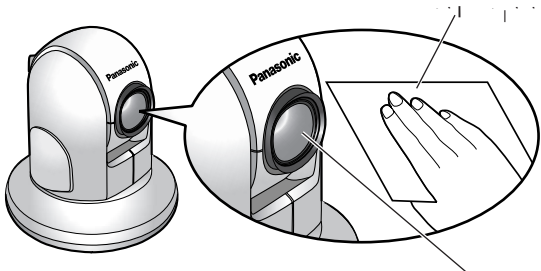


\*7                          ( 190)                          ) ( 15

# , & , % , = , + , - , \* , < , | , >

\*8 " : ; , . , / , \ , ~ , ` , ^ , \_ , { , }

## 7.3 Cleaning



### **Note**

- Do not use harsh chemicals or solvents to clean the device. Use a soft, dry cloth to wipe the lens and body.
- Do not use a high-pressure water spray or steam to clean the device.

# 7.4 Setting an IP Address on Your PC

1.

OS

Steps

2.

3.

98

2000,

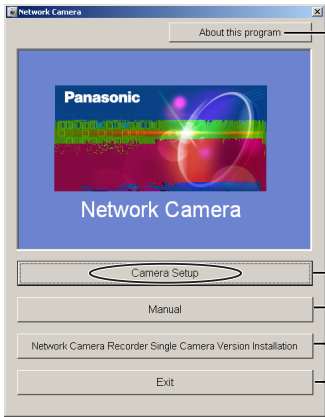
## Local IP Address

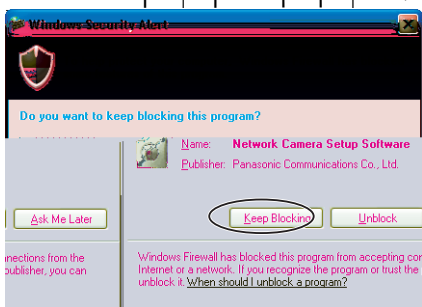
# 7.5 Using Setup Program

- Select the language of the program.
- Select the type of camera you are using.
- Select the type of connection you are using.
- Select the type of camera you are using.
- Select the type of camera you are using.

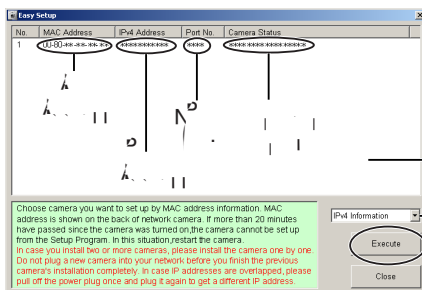
## Finding the camera

1. Select the type of camera you are using.
2. Select the type of camera you are using.

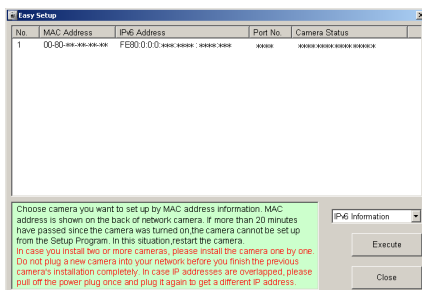




## IPv4 Information



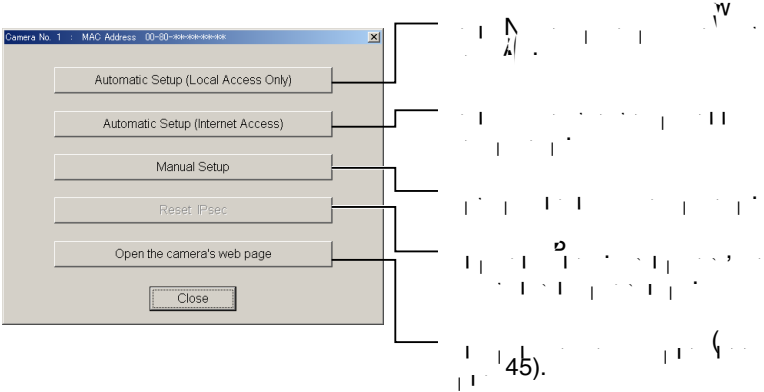
## IPv6 Information



## Note

# Automatic Setup (Local or Internet Access) or Manual Setup

- 1. Press the **Setup** button on the front panel of the camera.
- 2. Press the **Enter** button on the front panel of the camera.

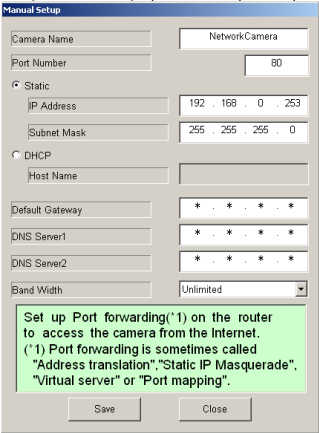


## Note

For more information on how to set up the camera, see the "Manual Setup" section.

## Manual Setup window

- 1. Press the **Setup** button on the front panel of the camera.
- 2. Press the **Enter** button on the front panel of the camera.
- 3. Press the **Manual Setup** button on the front panel of the camera.
- 4. Press the **Enter** button on the front panel of the camera.
- 5. Press the **Static** button on the front panel of the camera.
- 6. Press the **Enter** button on the front panel of the camera.
- 7. Press the **Dynamic** button on the front panel of the camera.
- 8. Press the **Enter** button on the front panel of the camera.
- 9. Press the **Static** button on the front panel of the camera.
- 10. Press the **Enter** button on the front panel of the camera.
- 11. Press the **Dynamic** button on the front panel of the camera.
- 12. Press the **Enter** button on the front panel of the camera.
- 13. Press the **Static** button on the front panel of the camera.
- 14. Press the **Enter** button on the front panel of the camera.
- 15. Press the **Dynamic** button on the front panel of the camera.
- 16. Press the **Enter** button on the front panel of the camera.
- 17. Press the **Static** button on the front panel of the camera.
- 18. Press the **Enter** button on the front panel of the camera.
- 19. Press the **Dynamic** button on the front panel of the camera.
- 20. Press the **Enter** button on the front panel of the camera.
- 21. Press the **Static** button on the front panel of the camera.
- 22. Press the **Enter** button on the front panel of the camera.
- 23. Press the **Dynamic** button on the front panel of the camera.
- 24. Press the **Enter** button on the front panel of the camera.
- 25. Press the **Static** button on the front panel of the camera.
- 26. Press the **Enter** button on the front panel of the camera.
- 27. Press the **Dynamic** button on the front panel of the camera.
- 28. Press the **Enter** button on the front panel of the camera.
- 29. Press the **Static** button on the front panel of the camera.
- 30. Press the **Enter** button on the front panel of the camera.
- 31. Press the **Dynamic** button on the front panel of the camera.
- 32. Press the **Enter** button on the front panel of the camera.
- 33. Press the **Static** button on the front panel of the camera.
- 34. Press the **Enter** button on the front panel of the camera.
- 35. Press the **Dynamic** button on the front panel of the camera.
- 36. Press the **Enter** button on the front panel of the camera.
- 37. Press the **Static** button on the front panel of the camera.
- 38. Press the **Enter** button on the front panel of the camera.
- 39. Press the **Dynamic** button on the front panel of the camera.
- 40. Press the **Enter** button on the front panel of the camera.
- 41. Press the **Static** button on the front panel of the camera.
- 42. Press the **Enter** button on the front panel of the camera.
- 43. Press the **Dynamic** button on the front panel of the camera.
- 44. Press the **Enter** button on the front panel of the camera.
- 45. Press the **Static** button on the front panel of the camera.
- 46. Press the **Enter** button on the front panel of the camera.
- 47. Press the **Dynamic** button on the front panel of the camera.
- 48. Press the **Enter** button on the front panel of the camera.
- 49. Press the **Static** button on the front panel of the camera.
- 50. Press the **Enter** button on the front panel of the camera.
- 51. Press the **Dynamic** button on the front panel of the camera.
- 52. Press the **Enter** button on the front panel of the camera.
- 53. Press the **Static** button on the front panel of the camera.
- 54. Press the **Enter** button on the front panel of the camera.
- 55. Press the **Dynamic** button on the front panel of the camera.
- 56. Press the **Enter** button on the front panel of the camera.
- 57. Press the **Static** button on the front panel of the camera.
- 58. Press the **Enter** button on the front panel of the camera.
- 59. Press the **Dynamic** button on the front panel of the camera.
- 60. Press the **Enter** button on the front panel of the camera.
- 61. Press the **Static** button on the front panel of the camera.
- 62. Press the **Enter** button on the front panel of the camera.
- 63. Press the **Dynamic** button on the front panel of the camera.
- 64. Press the **Enter** button on the front panel of the camera.
- 65. Press the **Static** button on the front panel of the camera.
- 66. Press the **Enter** button on the front panel of the camera.
- 67. Press the **Dynamic** button on the front panel of the camera.
- 68. Press the **Enter** button on the front panel of the camera.
- 69. Press the **Static** button on the front panel of the camera.
- 70. Press the **Enter** button on the front panel of the camera.
- 71. Press the **Dynamic** button on the front panel of the camera.
- 72. Press the **Enter** button on the front panel of the camera.
- 73. Press the **Static** button on the front panel of the camera.
- 74. Press the **Enter** button on the front panel of the camera.
- 75. Press the **Dynamic** button on the front panel of the camera.
- 76. Press the **Enter** button on the front panel of the camera.
- 77. Press the **Static** button on the front panel of the camera.
- 78. Press the **Enter** button on the front panel of the camera.
- 79. Press the **Dynamic** button on the front panel of the camera.
- 80. Press the **Enter** button on the front panel of the camera.
- 81. Press the **Static** button on the front panel of the camera.
- 82. Press the **Enter** button on the front panel of the camera.
- 83. Press the **Dynamic** button on the front panel of the camera.
- 84. Press the **Enter** button on the front panel of the camera.
- 85. Press the **Static** button on the front panel of the camera.
- 86. Press the **Enter** button on the front panel of the camera.
- 87. Press the **Dynamic** button on the front panel of the camera.
- 88. Press the **Enter** button on the front panel of the camera.
- 89. Press the **Static** button on the front panel of the camera.
- 90. Press the **Enter** button on the front panel of the camera.
- 91. Press the **Dynamic** button on the front panel of the camera.
- 92. Press the **Enter** button on the front panel of the camera.
- 93. Press the **Static** button on the front panel of the camera.
- 94. Press the **Enter** button on the front panel of the camera.
- 95. Press the **Dynamic** button on the front panel of the camera.
- 96. Press the **Enter** button on the front panel of the camera.
- 97. Press the **Static** button on the front panel of the camera.
- 98. Press the **Enter** button on the front panel of the camera.
- 99. Press the **Dynamic** button on the front panel of the camera.
- 100. Press the **Enter** button on the front panel of the camera.

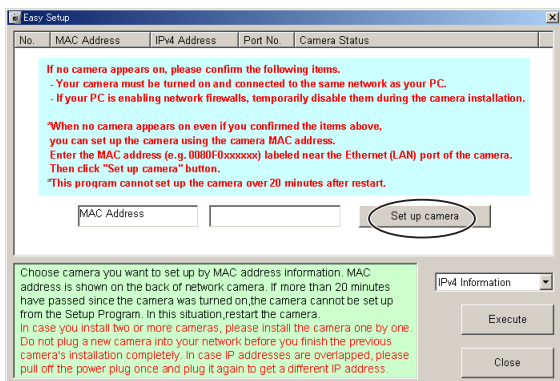


3.

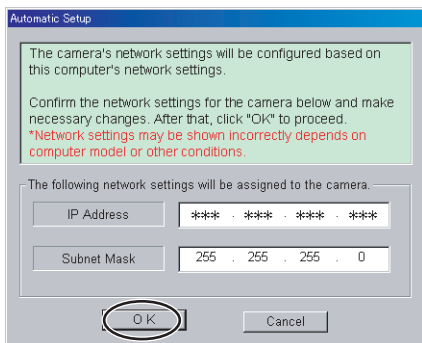
## Setting up the Camera Using the MAC Address on the Setup Program

1.

### Note



2.



3.

**Security: Administrator**

New User Name (6 to 15 characters)	<input type="text"/>
New Password (6 to 15 characters)	<input type="password"/>
Retype new password	<input type="password"/>

**Note :** (1) You'll be asked for User name and password to open camera image.  
 Please keep your User Name and Password securely.  
 (2) Alphabet and number only. [Space],[ ],[&],[.],[<] or [>] are not allowed.  
 (3) A capital letter/small letter is distinguished.  
 (4) User Name and Password must be different from each other.  
 (5) It is strongly recommended to change password regularly for security.

4.

**Enter Network Password**

Please type your user name and password.

Site: \*\*\*\*\*

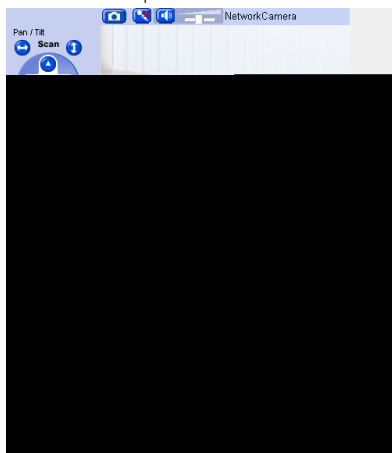
Realm: \*\*\*\*\*

User Name:

Password:

☐ Save this password in your password list

5.





---

## Note

- 17
- 17
- When you are using a router that supports UPnP™
  1. 67)
  2. 70)
  3. 13). 10
- When you are using a router that does not support UPnP™
  1. 68.

## 7.6 Setting Your PC

### 7.6.1 Setting Proxy Server Settings on a Web Browser

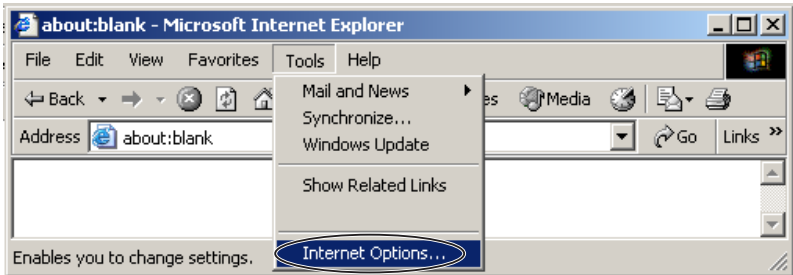
- In the **Content Advisor** section, click **Content Advisor** in the left pane. In the right pane, click **Content Advisor Settings**.
- In the **Content Advisor** section, click **Content Advisor** in the left pane. In the right pane, click **Content Advisor Settings**.
- In the **Content Advisor** section, click **Content Advisor** in the left pane. In the right pane, click **Content Advisor Settings**.

#### Note

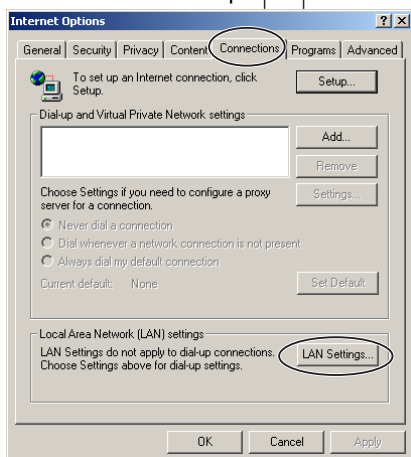
- A proxy server is a computer that acts as an intermediary between your computer and the Internet. It can be used to filter content, cache data, and provide a secure connection to the Internet.
- Proxy servers are often used in corporate environments to provide a secure connection to the Internet and to filter content.
- Proxy servers can also be used to cache data, which can improve performance when accessing the Internet.
- Proxy servers can also be used to provide a secure connection to the Internet.

### How to Set Proxy Server Settings

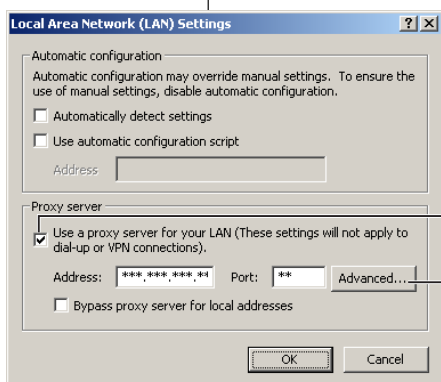
1. Open Internet Explorer (version 6.0 or later).
2. Click **Tools** → **Internet Options**.



3.

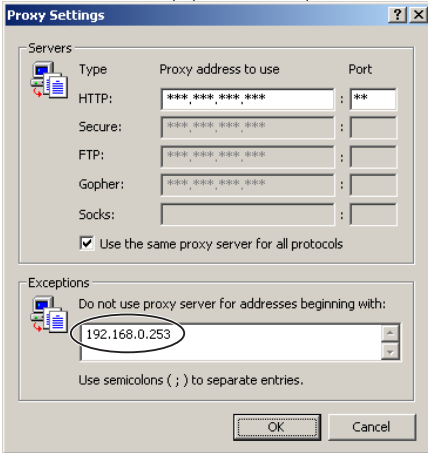


4.



5.

Click on the **Exceptions** tab and add the IP address (192.168.0.253) to the list of exceptions.



6.

Click on the **Exceptions** tab and add the IP address (192.168.0.253) to the list of exceptions.

### Note

— The IP address (192.168.0.253) is the IP address of the host that is used for the proxy server.

---

## 7.6.2 Setting UPnP™ to Display Camera Shortcut in My

# 7.7 ASCII Character Table

ASCII Character Table					
(	0		o	.	.
	1	A			.
=	2				
#	3				I
\$	4			.	
%	5		\	.	
&	6			.	w
'	7			I	'
(	8				
)	9				>
*	:	<		.	I
+	;			.	.
,	<		.		.
-	=	N			.
.	>			.	.
/	?			.	.

# 7.8 File Size and Number of Buffered Images

**Note**

Resolution	Items	Capture	Favor Clarity	Standard	Favor Motion	Mobile Phone*1
640 480 ( 100%)	Still	60s	50s	33s	20s	-
	Video	-	40	60	100	-
320 240 ( 50%)	Still	30s	25s	16s	8s	8s
	Video	-	80	125	250	250
160 120 ( 25%)	Still	10s	7s	5s	3s	3s
	Video	-	290	400	675	675

**The maximum number of Buffer/Transfer images**

5

E.g.

320 240  
125  
40  
3

# 7.9 Number of Images on the SD Memory Card

2	:	0.02
1	:	0.01
512	:	0.512
256	:	256
128	:	128
64	:	064

Resolution/ Image Quality		2 GB	1 GB	512 MB
160 ( )		620,000	300,000	157,000
		370,000	180,000	94,000
		260,000	130,000	67,000
320 ( )		230,000	110,000	58,000
		115,000	58,000	29,000
		70,000	37,000	18,000
640 ( )		90,000	47,000	23,000
		55,000	28,000	14,000
		35,000	18,000	9,000

Resolution/ Image Quality		256 MB	128 MB	64 MB
160 ( )		78,000	39,000	19,000
		47,000	23,000	11,000
		33,000	16,000	8,000
320 ( )		29,000	14,000	7,000
		14,000	7,000	3,000
		9,000	4,000	2,000
640 ( )		11,000	5,000	2,000
		7,000	3,000	1,000
		4,000	2,000	1,000



## 7.10 Specifications

## Network Camera

Items	Specifications
12 / 42	(21 , 2 )
-175, +175,	
-120, 0 ( , )/	
0, +90 ( , )	
1/4-	( , ), 380,000
( , )	

## Other Specifications



Items	Specifications
	<b>BB-HCM381A:</b> 100 240 \ , 50/60 > 12 \ , 1 : 12 <b>BB-HCE481A:</b> : 48 \ 802.3 - : 11
	$\pm 15$ ,
	: 0 , (+32 , ) +40 , (+104 , ) : 0 , (+32 , ) +50 , (+122 , )
	: 20 % 80 % ( ) : 20 % 80 % ( )

- \*1
- \*2
- \*3
- \*4

# Index

## A

4  
19  
91  
107  
137, 156  
30  
190  
86  
9, 11  
81

## B

38

## C

13  
80  
22  
41, 44  
178  
21

## D

77  
9  
167  
70, 75

## E

9  
164  
9, 11, 164  
152

## F

9,  
11, 166  
28

## G

93

## H

163  
9, 11  
30

## I

145  
153  
57  
6  
15

## L

8, 10, 178  
34  
161  
92

## M

9, 11  
154  
119, 133  
36  
148

## N

( 4 ) 48  
( 6 ) 53

## O

23, 24  
150

## P

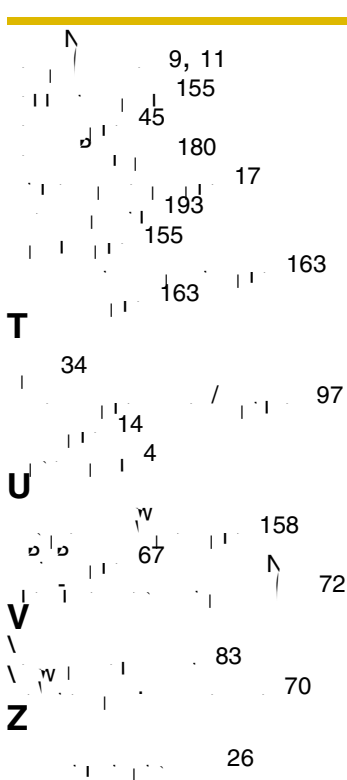
25, 84  
11  
31  
163

## R

157  
162

## S

160  
88



### For product service



1-800-272-7033

### When you ship the product



### Panasonic Consumer Electronics Company, Division of Panasonic Corporation of North America

One Panasonic Way, Secaucus, New Jersey 07094

### Panasonic Puerto Rico, Inc.

San Gabriel Industrial Park, Ave. 65 de Infantería, Km. 9.5,  
Carolina, Puerto Rico 00985

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